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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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Vol. XLIV.

LONDON, ONTARIO, JULY 1, 1909.

No. 875

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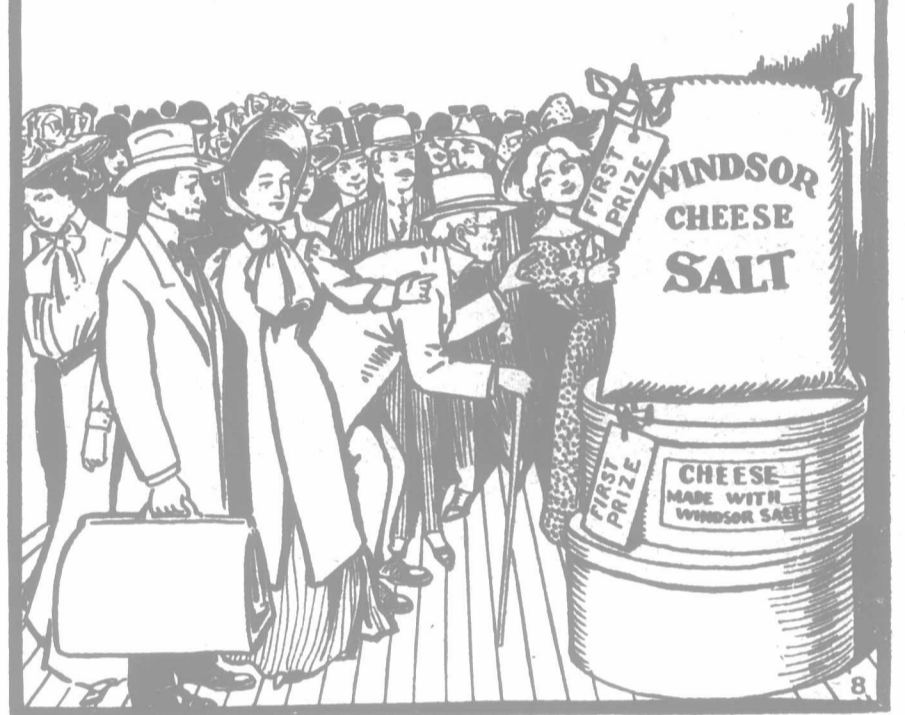
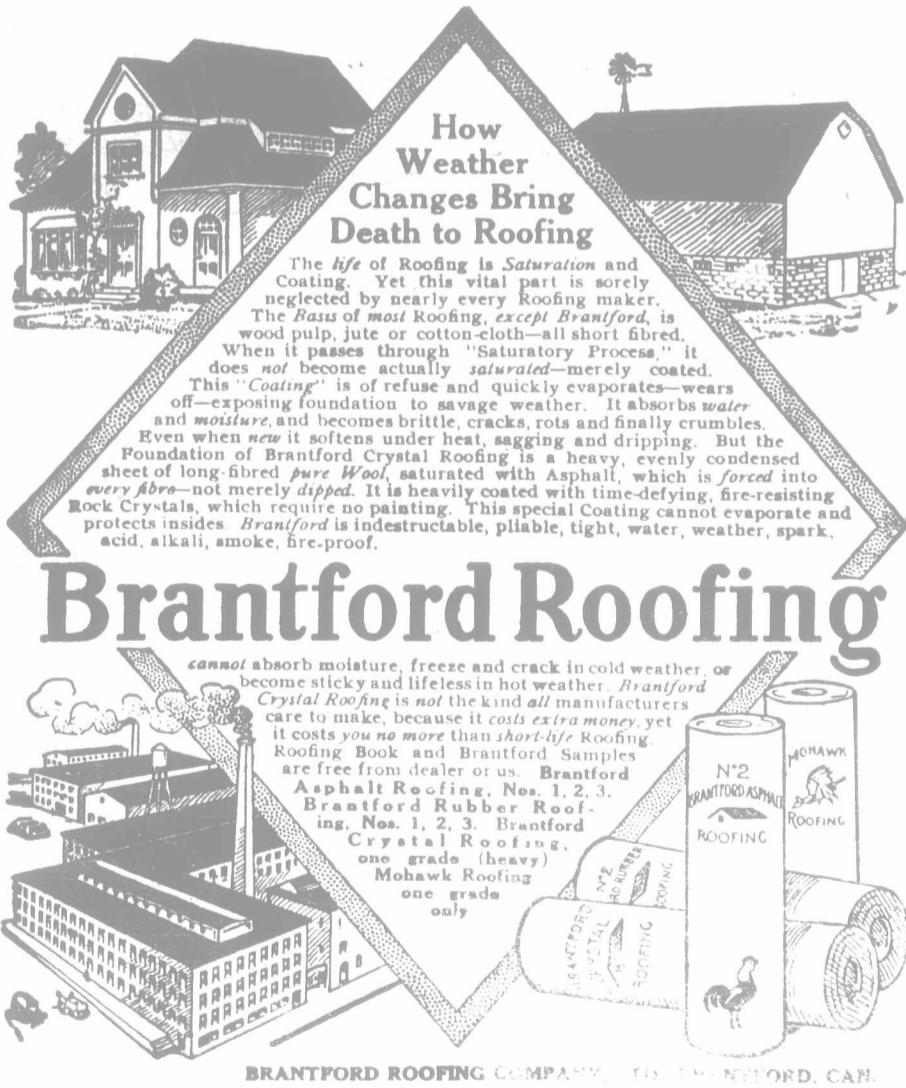
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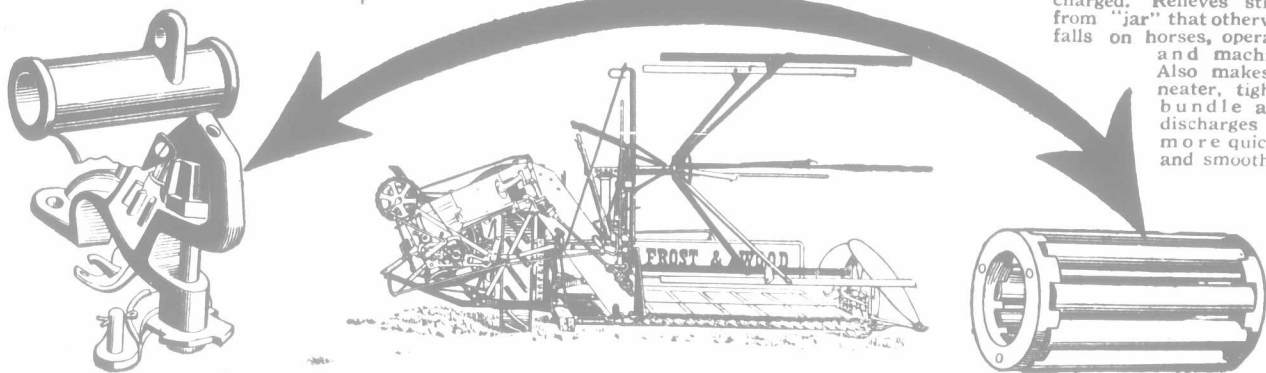
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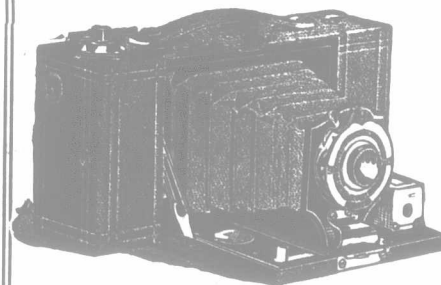
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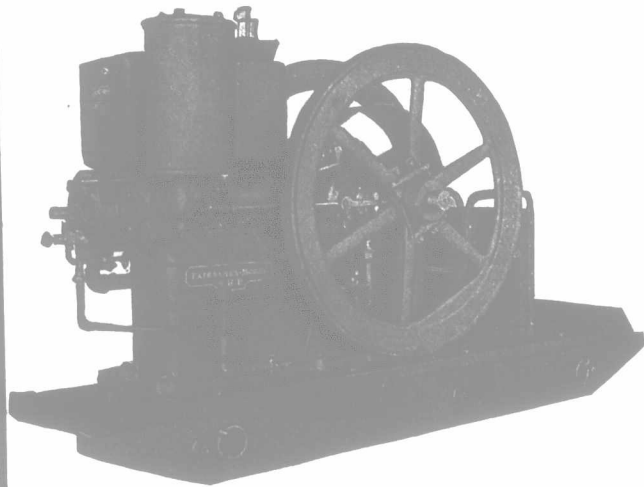
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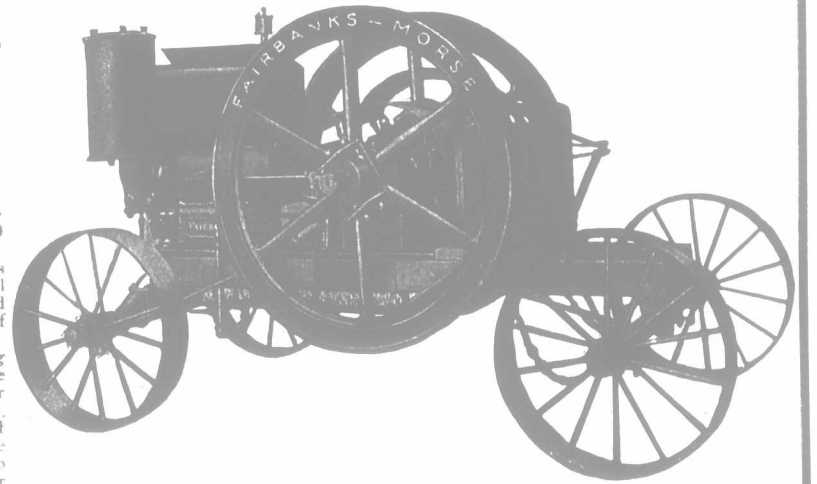
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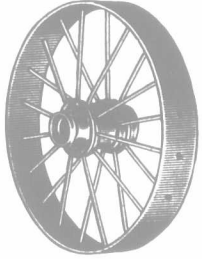
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The Farmer's Advocate

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"Persevere and Succeed."

Established 1866.

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Vol. XLIV.

LONDON, ONTARIO, JULY 1, 1909

No. 875

EDITORIAL

Dominion Day—the birthday of the nation!

An extremely late season, is the word all across the country, from the Peace River District of Alberta, to Quebec and the Maritime Provinces. It is said the ice was a month late this spring in moving out of Lake Athabasca.

Encyclopedic is the only word that seemed to fill the bill, as we laid down the proof-sheets of the half-yearly index covering the articles and illustrations from January to June, 1909. Save every number of the paper, stitch each volume together with the number containing the index on top, and accumulate an invaluable ready-reference library.

Another dairymen's year. Twelve-cent cheese is a money-making commodity, even under present conditions of artificially-enhanced cost of production. Conjoined with attractive selling values, we have the assurance of a considerably increased make throughout Western Ontario, and somewhat of a betterment, also, in the eastern part of the Province, although in some localities factories were late in commencing.

Twenty-four billion dollars! Such is the debt of Europe, owed to the unseen empire of finance, the money-lenders of the world, according to E. Alexander, in the Saturday Evening Post. And most of this monstrous twenty-four-billion-dollar debt has been piled up in sacrifice to the mendicant god of war. Yet we call ourselves civilized! How such figures must impress the heathen as to the beneficence of Occidental religion!

An acre of soiling crop will produce more nutriment than several acres of closely-grazed pasture. If the meadows seem likely to be short, it will be the part of economy to help them out by cutting some green alfalfa, clover, or even grain, to feed the cows, either in stable or in field, preferably in the stable at milking time. Particularly if there be a lodged patch, should it be used in this way, as such areas not only produce ill-filled heads, but are quite likely to smother out the seeding of clover.

Wide-swath haying implements pay in two ways: economy of time, and capacity for rushing operations in those critical periods when the weather is favorable. The important point is not whether a certain implement will suffice to do the work with, but whether it will enable the owner and his employees to make maximum wages while performing it. J. H. Grisdale, Agriculturist of the Central Experimental Farm, Ottawa, struck it right when, in correspondence to this paper two years ago, he remarked that "On the Experimental Farm the largest machines available are used, since the land is fairly free from stone, and fairly even, a seven-foot mower, a twelve-foot horse rake, and sixteen-foot racks on the wagons, being the rule." When one has a complete outfit of the narrow-swath machines, economy may compel him for a time to make the best of them, but when buying new ones, get the largest ones made, except, perhaps, for very rough or very marshy land, or possibly on very small farms, when only light teams are kept.

Speed the Plowing.

From the pointed stick of the ancient Egyptian, forced through the ground as it was drawn forward, to the improved, twentieth-century, two-furrow plow of the Canadian, seems a far call. Yet, leaving out of account the steam gang implement, popularly associated with bonanza farming, it is remarkable, through all the passing centuries, how slow has been the progress of improvement in this most primal of tillage tools. As a means of inverting and stirring the top soil, thereby preventing the growth of weeds, incorporating fertility (applied or grown), and improving the mechanical condition of the soil by aeration and drainage, so that its elements may become available for plant growth, the single-furrow walking plow, during the past century, in Great Britain and America, probably reached its highest stage of excellence. Different views have been entertained as to the depth and style of the furrow, but plowing itself continues the fundamental process in soil culture; and yet, in the matter of speed, on the ordinary farm, the plow remained as it was for generations. The self-binder displaced the cradle; tillage and haying machinery of wide sweep supplanted the slow and primitive tools of former days, but the plow still turned its single narrow strip, at the rate of $1\frac{1}{2}$ to $1\frac{3}{4}$ acres per day, with the service of a man and team. The first advent of the double-furrow plow many years ago met with a reverse, because of the heavy draft and other reasons, due, perhaps, to structural defects. But the scarcity of labor and the ever-increasing value of time in farming operations has again brought the implement to the front. The foremost plow manufacturers of the country have addressed themselves in earnest to its improvement, so that it now bids fair to hold its place as an efficient implement and a real time-saver.

The uncertainties of weather make it imperative that plowing be done more speedily, and at the right time. Almost invariably, the early crops are the best crops, and plowing absorbs the most time. Then, again, in a dry autumn like that of 1908 there were many farms where the soil became so hard that the ordinary single plow could not be held in the ground, let alone turn it over properly. In some cases, even a two-furrow walking plow, with the three-horse team, was scarcely equal to the task, but we have in mind cases where a riding plow and four horses abreast achieved the seemingly impossible, and did it well, the added weight of the operator holding the plow down to its work.

Effective use for the two-furrow implement has been found in doing the regular fall plowing six or seven inches deep, of stubble land soon after harvest, instead of the plan of early skimming, with deeper plowing nearer winter, a laborious and not altogether satisfactory method. Should the land show a growth of weeds under the new plan, the use of the cultivator is advised.

It may be said that the two-furrow plow is hard on the horses, and it must be conceded that, where three horses and one man perform almost the work of two men and four horses, extra effort is being put forth, or more units of work performed. Even were four horses required, the time of one man would be saved. To accomplish this, good horse-power will certainly be required. The real point is, however, do we get the added result in plowing? People do not object to big crops because they abstract plant food largely from the soil, for they have the crop, and there is the residue in the soil. Is it lazy-looking, and a hardship on horses that a man should ride the plow? If he feels that way about it, why, he is

not compelled to use a riding plow. But is it a "hardship" for the three or four properly-fed horses of the blocky type? Suppose it were an onerous task, when the issue is between man and horse, which is to bear the brunt of toil? What are farm horses for? The plowman who uses his horses aright on a single-furrow plow will not likely abuse them, even though he turns over from three to four acres of land in the day's work, and right there lies the great advantage of the plow that turns two furrows instead of one.

In usage, dependent upon soil and other conditions, some localities prefer the walking plow, while others elect to ride. In our own observation, it appears to be largely a matter of local custom. When three horses are used, two walk on the land and one in the furrow, but when four are used, one walks on the plowed ground, and should be given some advantage on the double-tree. It is preferable to turn to the left; and if there is a furrow of the previous plowing to follow, it can be used for "striking out," though some use the single plow both to "strike out" and finish the furrows, one hitching-up sufficing for each operation. Narrow headlands are best done with the single plow. Wide lands and long fields are the natural complement of the two-furrow plow, in order to the greatest saving of time. In starting the plow for the first time, the aid of an expert will effect a saving of time in learning the use of levers and making proper adjustment for depth and width of furrow, and of the horse-eveners. Though more expensive, the rolling coulter is very generally preferred, as it makes a cleaner cut of sod, weeds or lumps, and the friction is probably less than with the straight, rigid style. The use of the two-furrow plow on very hilly or rocky farms and hillsides is, perhaps, inadvisable. While fancy furrow-turning of the plowing-match style may not be generally accomplished by the two-furrow plow, still we are satisfied that, with the structural improvement being made, and the more thorough knowledge of how to select types of plows suitable to different soils, such as sand, heavy clay, or clay loam, work will be done which the expert, with the wheelless, single, walking implement of yore, might concede as entitled to the designation of PLOWING.

In the foregoing we have not undertaken to do more than outline the chief points in the use of the two-furrow plow, and should be glad to hear from readers who have had the experience of a season or two in its actual use, with any observations that they might consider useful to others in adding such an implement to their outfit of farm machinery.

"The supply of farm laborers about equals the demand, while good wages are paid; and who is more deserving of it?" writes an Ontario Co. correspondent of "The Farmer's Advocate." This is the right way of looking at the matter. The true and beneficent way to solve the labor problem is not to try how cheaply we can manage to get help, but to study and plan how much we can safely afford to pay. When every employer is anxious to devise means of making labor more productive, so that he can afford to pay his men better, agriculture will be on the highroad to progressive economy. Surely the laborer is worthy of his hire. Efficient, well-paid labor, with modern, labor-saving methods, will produce much more than cheap labor, with the time-consuming practices which it tends to perpetuate. In the long run, an era of high wages, and efficient farm help will render conditions more favorable to all who are engaged in the industry, and by no means least to the employer himself.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED)

JOHN WELD, MANAGER

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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Nova Scotia, 1909, Legislation of Interest to Farmers.

A PUBLIC UTILITIES COMMISSION.

No legislation of a distinctively agricultural character was passed by the Legislature of Nova Scotia during its session of 1909. However, several acts were passed which will prove of great importance to the farmers of the Province. The first, at least in numerical order, is the act relating to the control of "public utilities." This act was passed in response to a strong agitation by the citizens of various towns and members of the Provincial and County Farmers' Associations, who for some time have been asking for at least a measure of Government control over such public utilities as electric power and telephones.

The act provides that the Governor-in-Council may appoint three persons who shall constitute a Board of Commissioners of public utilities. The salaries and expenses of this Board shall be borne by the several public utilities, according to their gross earnings.

The act defines "public utility" as follows: "Public Utility" means and includes every corporation, company, person, association of persons, their lessees, trustees, liquidators or receivers appointed by any court that now or hereafter owns or may own, operate, manage or control, any plant or equipment for the conveyance of telephone messages, or for the production, transmission, delivery or furnishing of heat, light, water or power, either directly or indirectly, to or for the public; and also means and includes any city or incorporated town that now or hereafter owns or may own, operate, manage or control any plant or equipment for the production, transmission, delivery or furnishing of heat, light, water or power, either directly or indirectly, to or for any other city or incorporated town.

The act requires that every public utility must furnish reasonably adequate service, and that the charges shall be reasonable and just, every unjust or unreasonable charge being prohibited and unlawful.

Every public utility shall annually make a re-

turn to the Board, setting forth the amount of its authorized capital, its capital paid up, its liabilities and assets, its receipts and expenditures for the preceding year, its dividends paid or declared, and such other statements showing its financial condition, as may be required by the Board.

Every public utility shall file with the Board schedules, which shall be open to public inspection, showing all rates, tolls and charges, and no change can be made in such schedule without filing such with the Board.

No public utility shall receive a greater or less compensation for any service performed than is prescribed in the schedules which are at the time in force. Discrimination in favor of any individual, firm or corporation is liable to a penalty of not less than fifty dollars, nor more than five hundred dollars. A similar penalty attaches to the person, firm or corporation which shall solicit, accept or receive any rebate, concession or discrimination.

On the other hand, the act provides all public utilities the right, when not paid for service rendered, to discontinue the service, and to enter private premises and separate and take away such appliances as belong to the public utility.

CONTROL OF TUBERCULOSIS.

Another important act was that in amendment to "The Public Health Act," and refers to methods of dealing with tuberculosis. The Act states that, it shall be the duty of every physician attending a person suffering from tuberculosis to report to the Provincial Health Officer the particulars of the case.

The act also states that every city, town or municipality may, by by-law, establish and maintain local hospitals or sanatoria for the accommodation and treatment of advanced cases of tuberculosis, for which purpose they are hereby authorized to issue debentures.

The council of every town or municipality shall also have power to make by-laws for the cleaning, purifying, ventilating and disinfecting of public and private buildings, for preventing excretion in public places, and the locations and regulation of slaughter-houses.

No person suffering from advanced pulmonary tuberculosis shall knowingly engage, personally, in the handling of foodstuffs.

STATISTICS AND OTHER MATTERS.

Another act, intended to facilitate the securing of facts, statistics and other information relating to agriculture, fishing, mining, etc., provides that it shall be the duty of the Secretary of Industries and Immigration to distribute schedules, etc., for the purpose of securing this information. This act attaches a penalty to the person who wilfully or without lawful excuse refuses or neglects to fill up any such schedule.

This act will lead to the securing of much more reliable information relative to the industries of the Province than has heretofore been provided the public.

The other acts of general interest to farmers consist of amendments to the Public Highways Act, which, it will be remembered, was a special feature of last year's legislation, according to which the highways were placed under the supervision of a road inspector for each municipality. The act relating to the protection of forests was also amended, with a view to insisting upon a still more rigid fire-rangin system.

Of interest to those owning dyked marsh lands is the act amending that relating to the improvement of dyked and marsh lands. This act makes provision by which any owner of such lands who has no access by road or right of way to a public highway, can have such road located.

REACTIONARY DOG LEGISLATION.

By way of showing the trend of public opinion relative to the control of dogs, it is interesting, and, no doubt, to many, disheartening, to note that special legislation was passed repealing certain by-laws passed by the municipal council of the County of Halifax. These by-laws provided for the taxing of all dogs owned in the County of Halifax, but proved so unpopular as to be made a leading issue in the recent election campaign. One would like to know what was the farmers' real point of view in relation to the protection of sheep through the control of dogs. We have never yet attended a public meeting in the Province, where the question was discussed, but that we have noted an almost unanimous verdict in favor of drastic legislation against the dog; but it is curious to notice that, whenever the matter becomes a live issue, either these men fail to urge their ideas, or are dominated by those who do not belong to farmers' organizations. In this, we have touched one of the weakest features

in our farmers' societies and associations, viz., that, when assembled in conference, they will pass various measures relative to their own interests, but when the conference is adjourned they seem to give the matter no further active support. It would seem as if many conferences and meetings were considered as ends in themselves, instead of meetings for deliberation upon issues of mutual interest in regard to which it was intended to take definite action.

Hay or Straw?

As these lines are written it seems likely that the current number of "The Farmer's Advocate" will find some of its readers engaged in or about to commence haying operations. What is the crop to be—hay or straw? Millions of tons of good grass and clover, especially the latter, are annually converted into a product more nearly resembling straw than well-cured hay, in respect to palatability and feeding value. Late cutting, hasty curing and failure to sweat the clover in coils are some of the errors most commonly responsible. Then, bran is bought at twenty or twenty-five dollars a ton to make up for the deficiency between clover straw and an early-cut, well-cured quality of clover hay? Does this pay?

HORSES

To Exhibition Secretaries.

Editor "The Farmer's Advocate":

Allow me to thank you for inserting my last letter re the registration of Hackney horses in your valuable journal; also to congratulate you on the very wide circulation of "The Farmer's Advocate." I have received inquiries in this matter of inspection and registration of Hackney mares and horses from Quebec, St. John, Vancouver, Manitoba, Saskatchewan, and a number of places in Ontario.

May I ask you to say that the Canadian Hackney Horse Society will be pleased to hear from Secretaries of Fairs and Shows who give classes for Hackney horses and mares, as this Society intends giving a very handsome Rosette, with the photo of this year's champion at the London Hackney Society's Show in the center, for:

1. Best Hackney Stallion, any height, any age.

2. Best Hackney mare, any height, any age.

All competitors to be entered in Canadian Hackney Studbook.

The undersigned will be pleased to hear from the various secretaries in relation to the above. I am also pleased to tell you that the various reports heard from owners of Hackney horses are of the very best, and there is a great demand for well-broken horses of this breed.

Toronto, Ont. H. M. ROBINSON, Sec.-Treas.

Advantage of Mowing in Strips.

In mowing a square field, the teamster is sometimes puzzled as to whether it is better to drive round and round, or to split the field into two or more strips. Some think it makes less turning to divide the field. This is a mistake. The number of turns will be exactly the same in either case. Nevertheless, there are certain distinct advantages in dividing the field, for, while it does not lessen the number of turns, it reduces the number of awkward ones. A narrow strip may be shaved down from each side, the end turns being made at the last with a free, circling swing, without bothering to stop and cut across, whereas a square piece is shortened as fast as it is narrowed, involving many square turns at the last.

There is the further advantage of being able to do most of the cutting in the direction of the "lands" or "ridges," instead of crossing furrows half the time, as in a square piece. Another advantage is the subsequent convenience of raking, for, with a field mowed in strips one may commence raking at one side, and, working across, rake all the field at approximately the same stage of curing, whereas otherwise it would be necessary to go round and round with the rake, in order to accomplish this result.

When the new hay comes in, the horses will want to eat more than is good or safe for them. Do not fill the mangers so full at night that there will be hay left in them the next morning. Give them a little less than they would eat.

Heavy Horses Pay.

In the southern part of Dufferin County, and particularly in Luther Township, George Clayton & Sons are recognized as being among the successful horse-breeders. On a 200-acre farm about fifteen horses are kept, half of which are pure-bred Clydesdales. Each season about six mares are bred, and the offspring sold generally at the age of two years. The stock always is almost in shape for the show-ring.

"This season," said Mr. Clayton to "The Farmer's Advocate," "we are having about average luck. We bred six mares last summer, and four are in foal. Sometimes we do better, and sometimes worse. Some may think it does not pay to raise heavy horses, but figures perhaps will show that it does. We had a grade mare that died last fall at the age of eighteen. She raised us six foals, three of which we sold as follows: \$200, \$185, and \$225. The other three are still on the farm, and we value them at \$200, \$250, and \$200. Another eleven-year-old mare has had four foals, raised three, and is due to foal again this July. We value her oldest, a mare now with foal at foot, at \$400. Another is a stallion worth \$550, and her yearling is valued at over \$200.

"We seldom sell yearlings. Usually, pasture and stable feeds are abundant, and it pays to hold them until they are two years old, especially the fillies. The male colts not kept as stallions are castrated in June as yearlings, and put in high condition the winter after they are two years old.

"Our brood mares are worked before, but not after foaling. We like to have our horses fit to go to the fall fairs, and raising a foal is enough. During the summer, pasture is sufficient, unless it becomes dry and short, in which case they are stabled, and given hay and oats three times a day, being outside at nights. Fillies are weaned and put in box stalls, with clover hay, oats and bran as rations. Occasionally roots are fed, and in some cases a handful of ground flax twice a day."

Heavy Draft Horses.

The accompanying photograph of heavy-draft teams, exhibited at the Winnipeg Industrial Exhibition last year, twelve pairs competing, also that of the six-horse team shown by Nelson Morris Company, of Chicago, at the International Horse Show in Old London, recently, are interesting illustrations of the growing popularity of heavy horses in America, while the increasing demand prevailing, and the high prices obtainable for horses of this class, indicate that the breeding of heavy-drafters is a decidedly profitable branch of stock-raising. There is little likelihood of the market for this class of horses being oversupplied, as the settlement of the vast areas of the West will for many years call for an increasing number of work horses, as will also our constantly-growing towns and cities. The increased interest tak-

en in high-class heavy horses in the Western Provinces speaks well for the future of the industry, and the display of this class at the leading shows of those Provinces is exceedingly creditable to the ambition and enterprise of the farmers of that section of the Dominion, who display good judgment in aiming to produce the best, since it is the class that commands the highest prices, and the best is none too good. With the services of so many high-class sires as are now available, the character of Canadian horses should be well maintained, provided care is observed in the breeding, selection and retention of a suitable class of mares.



Brood Mares at Work.

Type of mares from which Geo. Clayton & Sons, of Dufferin Co., Ont., are making money.

LIVE STOCK.

College Beeves.

Some fine cross-bred calves, being rapidly forced into baby beef, are, as usual, one of the features of interest to the O. A. C. excursionists this year. The best specimen is an Angus-Short-horn—always a good cross—which, at eight months of age, weighs 570 pounds, having, since February, 22nd, made a daily gain of two and two-thirds pounds. The others are gaining about two pounds daily. It is but fair to say that they have only been weaned about a month. Three pure-bred white Shorthorn steers were shown, two of them prizewinners at the fat-stock show,

and all excellent animals. One, at 15 months, weighs 960 pounds. The very smooth, blocky type of steers make scarcely the gain that the more growthy specimens do.

Weaning the Lambs.

When lambs are four months old, they will, as a rule, thrive better if weaned, provided they have good fresh pasture, than if left longer with their mothers. The milk supply by that time is generally failing, as in most summers the pastures become dry in the latter part of July and during the following months, and as the lambs are depending upon their mothers largely, they do not get enough sustenance from that source to make them grow well, and their insistent demands upon the ewes pull them down in condition, too. Usually, soon after the hay crop is harvested, fresh feed is found in the aftermath, which is very suitable for lambs, especially if it is principally clover, and the youngster should have the first chance to benefit from it.

It is well, when they are separated from their dams, that they be kept some considerable distance apart from them for the first few days, so that they may not hear each other calling, and the ewes should be kept on dry pasture for a week to skrink the milk flow, while any which show overfull udders should be milked two or three times, to avoid trouble in that quarter. The lambs should have access to pure water at will, and have salt at least once a week, or, better, a constant supply, kept under cover, so that they may partake of it when they require it. A change of pasture is relished by the sheep, as by most kinds of stock, and for variety, the lambs may do better for it, even though the feed be not more abundant. In the case of pure-bred lambs, intended for sale in the fall for breeding purposes or for exhibition, they should be fed twice a day a ration of oats and bran, with a little nutted oil cake added a little later on, in a trough in the field, or better, under cover in a shed, if convenient. The lambs will also be better for having access to a clean, partially-darkened shed for shelter from flies and the heat of the sun. Sheep or lambs intended for exhibition will stand shipping much better, and will fail much less, for having been grain-fed. Attention should be given to clipping and squaring the tails of the lambs when weaned, and again later on, if necessary, for cleanliness and better appearance.

It is good practice to have a patch or field of rape coming on for fall pasture for the lambs. This may be sown as late as the middle of July, and is best sown with a drill in rows about 24 inches apart, so that it may be horse-hoed, to hasten its growth. Rape will do very well sown broadcast in a favorable season, but will be more injured by tamping than if sown in rows. There is no pasture equal to rape for growing and fattening lambs in the fall, and frost does not injure its feeding value, but rather improves it, so that the lambs will thrive and fatten on it right up to



Heavy Draft Teams at Winnipeg Exhibition, 1908.

winter, and even after it is partially covered with snow. It is rarely that a lamb bloats on rape, but older sheep are liable to this trouble, and should be gradually introduced to it, being careful at first not to let them on the rape while it is wet with dew or rain, and they will be better for access, also, to a grass pasture field, but lambs will thrive and fatten on rape alone.

Sheep as Weed Destroyers.

The fact that sheep, more than any other class of farm stock, relish a variety in their diet, may well account for their usefulness in destroying weeds which give trouble in crop-growing, robbing the crops by extracting moisture and fertilizing properties from the land which should go to the nourishment and development of the crop, and which, if allowed to seed, multiply their kind rapidly. It is believed that quite ninety per cent. of the weeds that trouble the farmer are relished by sheep, and these include practically all the weeds that require special methods of treatment for their destruction. With the aid of a flock of sheep, and by judicious management, a farm may be cleared and kept clean of nearly all weeds, while those which remain may be so kept in check as to give little trouble. While sheep, on their own merits as producers of meat and wool, are too valuable an adjunct of farming to be treated as mere scavengers, and allowed only the refuse of available stock food, the fact that, from choice, even when given the run of good pasturage, they will consume weeds as an appetizer, and that they prefer the short, sweet nibble of grass to that which is rank and knee-high, adds to their value, and places them in the front rank in the list of live stock as profitable producers. It is easily capable of demonstration that, considering the cost of production in labor and value of feed consumed, and comparing the average prevailing market price per pound in a series of years for sheep alive or for mutton and lamb, with that for cattle or hogs, alive or dressed, the odds is regularly in favor of the sheep; while the fleece, which is an extra product not yielded by the other classes of stock, when prices for wool are fairly good, will nearly, if not quite, pay for the keep of the flock the whole year, while the yearly crop of lambs, as a rule, means an increase of 125 to 150 per cent. Referring to the matter of weed destruction by sheep, in bulletin No. 12 of the Dominion Department of Agriculture, by J. B. Spencer, B. S. A., of the Branch of the Live-stock Commissioner, appear letters of testimony from experienced flock-owners, from which we quote the following:

A. D. Gamley, Griswold, Manitoba: "I feel ashamed that, after keeping sheep so many years, I am unable to give you the names of all the noxious weeds sheep will destroy, but I have no doubt the reason is on account of the sheep. These weeds never bothered me much, and in this respect I was not observant; however, it seems to me that they eat them all, with the exception of the blue burr and thistles. Before coming up here from Brandon, I kept from 100 to 120 breeding ewes, and had unlimited pasture, where they were herded from seven in the morning until five or six in the evening, when they were turned in to a 70-acre pasture field, and where they also re-

mained on wet days. There never was a weed to be seen in this pasture. In the fall, after the grain was stacked, they were turned onto the summer-fallow, which had grown heavy with weeds. Because I had no fencing then, I could not turn in the sheep until the grain was nearly all stacked. In a very short time the field would be as bare as a billiard table. I might say that, in one or two years, when wheat was being docked from two bushels to five and seven bushels to the load, I was shipping my own wheat from Martinville, and had the grade certificates come back marked no dockage, and one per cent. is all I was ever docked. My summer-fallows would be from 40 to 70 acres, and at times it would have from 175 to 240 head, including lambs, feeding upon it."

Richard Gibson, Delaware, Ont., writes: "On my present farm, purchased a number of years ago, the pastures were overrun with the weeds known as blue weed, locally called 'blue devil.' One eighty acres was a complete mass of blue flowers, admired by all artists or poets who passed thereby. I doubt if to-day 100 plants are in flower on those eighty acres. Sheep alone did it, and registered Shropshires at that. The sheep disdain eating this plant until the flowers are in evidence, then they nibble the heart out, flowers and honey—not a bad combination, especially for sheep. I believe sheep would eradicate wild mustard, if used intelligently for that purpose. That they are very fond of it in two stages of its growth I am convinced. They eat it readily when very young, and again when in blossom. I cannot bear this out from experience with wild mustard, but I do know that in my part of Lincolnshire white mustard was extensively used as a forage plant, more particularly for breeding ewes during the autumn."

John Campbell, Woodville, Ont., writes: "The sooner a flock of sheep, good of its kind, is kept on practically every farm, the sooner will the income be materially increased, with the least cost for labor; and that not alone because of the direct profit, but also because of the very important part a flock plays in keeping weeds under control. At an Institute meeting in Western Ontario, last winter, one farmer gave his experience along this line. Until some ten years ago he kept sheep, had a clean farm, and weeds were nearly unknown. Following the fashion set by some of his neighbors, the sheep were sold, and soon after weeds demanded constant attention. Bad grew worse, until it was determined to stock up with a flock. The sheep came, and in a few years the weeds were once more under control. That is a fair sample of reports from members of flock-owners where sheep are utilized as weed-subduers."

Among the noxious weeds mentioned in other letters which are eaten by sheep are sweet clover, ox-eye daisy, sow thistle, ragweed, wild vetches, milkweed, burdock, dandelion, golden-rod, lamb's-quarter, wild carrot, ribgrass, ragwort (the source of the Pictou cattle disease), by which sheep are not harmed.

Experiments to determine the comparative feeding value of whey, pasteurized, skimmed, with separator, and just as it comes from the factory, are being carried on this year by the Animal Husbandry Department of the Ontario Agricultur-

al College. It is not expected, however, that at the College farm, where whey is received daily fresh from the Dairy Department, so much advantage from pasteurization will be shown as under ordinary cheese-factory conditions.

THE FARM.

The Road-destroying Auto.

"There are," said Clifford Richardson, Member American Society Civil Engineers, before the Oneida Historical Society, at Utica, N. Y., "several points in connection with the road problem which have received too little and demand the most careful attention."

It was the damage to French roads caused by heavy motor traffic, and the problem of how to meet it, which caused the Congress at Paris to be called.

The general opinion expressed at Paris by the ablest English and French engineers was that the road, to meet modern motor traffic, must be constructed with a more resistant surface, which is brought about by introducing into the wearing surface some bituminous cementing material.

Experiments made by the Office of Public Roads show by instantaneous photography that the damage to the roads is produced by the rear or traction wheels of motor cars, and particularly at a speed above 25 miles an hour. The force with which they were propelled was sufficient to cause a marked slip upon the surface of the hard roadbed, such as is often seen in an exaggerated manner on a frozen surface.

A road near Lynn, in Massachusetts, of almost perfect macadam construction, exposed to wind, sun and high-speed automobiles, had to be resurfaced after a single year's service.

W. C. Carpenter, County Surveyor, in Yorkshire, England, reported at the Paris Congress that the maintenance of roads in his district was \$182 per mile in 1890, and \$798 in 1908. Mr. Hooley, holding the same position in Nottinghamshire, states that the maintenance cost was formerly \$250 per mile, now it is \$750, and he advises a resurfacing with bituminous macadam.

Harold Parker, chairman of the Massachusetts Highway Commission, says that \$100 a mile had been the previous cost for maintaining macadam roads, and, to keep them in perfectly good condition, at least \$300 a mile should now be provided.

Figures in the possession of the Massachusetts Highway Commission show that about 53 per cent. of the destruction of State highways is due to automobiles. It may be, and indeed, it seems almost certain that a material will be found, if it has not already been found, which, when placed upon the surface, or embodied in the top course of a macadam road, will offer a surfacing which will not be destroyed by the abrading motion of the automobile wheels.

The best type of ordinary macadam road that can be constructed to-day will be rapidly destroyed by motor traffic, and recourse must be had to a bituminous macadam for relief.

O. A. C. Experimental Notes.

President G. C. Creelman, in the course of his address to the crowded hundreds of excursionists in the lunch-room, at the O. A. C., the other day, praised Ontario farmers as being second to none in achievements and morals. The output from the farms of the Province had doubled in the last fifteen years, though neither population nor area had increased. During his visit to Italy, last year, while trying to get information on agricultural subjects, and asking a good many questions, he would be questioned in turn. When asked where he came from, he answered, of course, Canada. "Is that anywhere near Ontario?" his questioners would inquire. "We have heard of Ontario; they know how to grow good crops there."

A large crowd always follows Prof. Zavitz, as he leads them about the experimental plots. Alfalfa-growing is a live subject to farmers at present, and nothing in the plots seemed to interest them more. Readers of "The Farmer's Advocate" have received a good deal of information on this subject of late, but two remarks of Professor Zavitz will bear emphasis. Alfalfa should be cut, not when it is in bloom, but when it is coming into bloom, when about one-tenth of the bloom has appeared. Experiments and analyses have shown that at this stage it contains the greatest amount of digestible nutrients. Red clover, on the contrary, is at its best when it has gone a little past full bloom, when about one-third of the blossoms have turned brown. It is well to sow alfalfa after a cultivated crop, as the land should be clear, not only of weeds, but of grass, as well. Canadian blue grass-wire grass is the worst enemy of alfalfa.

Considerable has been accomplished and much more is hoped for from the attempt to improve varieties of grain by crossing and selection. A



Weed-destroyers and Money makers.

large area of ground is occupied by grain under test in these experiments. Hundreds of labelled rows are to be seen, where each seed has been planted separately, eight inches apart. As showing the importance of such work, it is claimed that the increase in the barley crop in Ontario, in ten years, from four million bushels to twelve million bushels, has been due largely to the introduction of the better-yielding Mandscheuri variety. A distinct strain, known as No. 21, obtained from the Mandscheuri itself by selection and re-selection, is the best barley yet grown at the farm. It has longer, stiffer, cleaner straw, and is a better yielder. Seed of this variety is being distributed rapidly. One man in Huron County who had received one pound, in the third year had a crop of 900 bushels.

In answer to a question, it was stated that hill corn had yielded one ton per acre more than corn grown in drills.

Cement Foundation for Silo.

A stave silo may be erected on a smooth, clay bottom, but, for the protection of the lower ends of the staves, to insure its standing upright in good form, and to guard against trouble from rats, a concrete bottom should be provided. This may be flat around the circumference, and dished in the center, or it may consist of a cement floor, with a circular wall, say a foot high, the better to protect the stave ends from soaking, and from the accumulation of damp earth and litter so often seen lying about the foot of silos. The following illustrated article, describing how to lay off, and build such a silo foundation, is quoted from Circular 136, published by the United States Bureau of Animal Industry.

To lay out the foundation, drive a stake in the ground at the center of the proposed silo. Saw off this stake at the height desired for the foundation wall, which should be at least one foot above the ground on the high side, if the ground is sloping. One end of a straight 2 x 4-inch scantling, a little longer than is necessary to reach from the center of the silo to the outside of the foundation wall, should be nailed on top of the stake with a 10-penny spike. This spike then marks the exact center of the silo. From it, measure off on the scantling the distance to the inside and outside of foundation wall, and, having nailed on markers, as shown in Figure 1, lay off the foundation.

The thickness of the wall should vary from 10 to 18 inches, depending upon the size of the silo, the material of the foundation, and the ground on which it is located. The inside of the foundation wall should be at least two inches nearer to the center of the silo than the inside of the staves. Where the ground on which the silo is to be located is not level, the markers can be lengthened by holding a longer board against either marker (see Fig. 2), moving it up or down to keep it touching the ground while the scantling is held level. If the ground is very uneven, it may be difficult to make the line continuous, in which case points can be marked every few inches, and these joined afterwards.

For a concrete foundation, a ditch must be dug before any of the earth in the center is removed (see Fig. 3). The earth between the two lines that mark the inside and outside of the foundation should be taken out, until firm ground below frost line is reached, care being taken to cut the sides of the ditch down straight, and to leave the bottom level.

The concrete should be made of one part cement, three parts sand, and five parts broken stone. The broken stone may be of all sizes, up to pieces that will pass through a two-inch ring. Washed gravel, broken brick or screened cinders may be used in place of broken stone. If the gravel contains sand, the amount contained should be estimated by screening some of it, and the proportions of gravel and sand should be so adjusted as to conform approximately to the above formula.

For mixing the concrete, a box about 4 feet wide, 8 feet long, and 1 foot deep, may be used, or a simple floor or platform 6 by 10 feet will suffice. To measure the materials, an empty barrel (preferably a cement barrel) with both ends knocked out will be most convenient. First measure up sand enough for a batch of convenient size, and spread it on the floor or platform. Measure up the cement, spread it over the sand, and, with a hoe or shovel, mix them until no streaks appear. This mixture is then built up into a low, circular pile, with a crater-like basin in the center. Into this crater pour water, and, by drawing in the dry mixture from all sides with a hoe, mix thoroughly, adding more water, if necessary, until the hoe will leave the mortar without the mortar clinging to it, after which the mortar is spread out on one end of the platform. Now measure up the broken stone or coarse gravel, bench it with water to wash off all particles of dirt, and dump it on the wet mixture of sand and cement. The final mixing is done by shovelling the material back and forth until it is thoroughly mixed. It should be shovelled at least three

times. The concrete is now ready for use, and should be put in place with as little delay as possible.

Put in the first layer about 6 inches deep, and thoroughly ram the concrete until water appears on the surface. A good rammer may be made of a piece of 1 by 6-inch lumber, 2 feet long, with a hole bored in the center of one end to receive a 4-foot round handle. When the second layer is put on, the surface of the first layer should be perfectly clean and rough, and if dry, it should be sprinkled with water. Particular care should be taken to keep all dust and loose soil from the surface of each layer, as these prevent perfect adhesion.

After the ditch is filled to the surface of the ground, drive 2 x 4 stakes half an inch from the foundation on the inside, and 2 feet apart all the way round (see Fig. 4). With straightedge placed level—one end on top of the center stake, and the other against the side of the form stake—mark on the form stake the height that the wall should be, as previously determined. Mark thus on every second stake. Take pieces of lumber one-half inch thick by 6 inches wide, preferably green, with straight edges, and bend around outside of

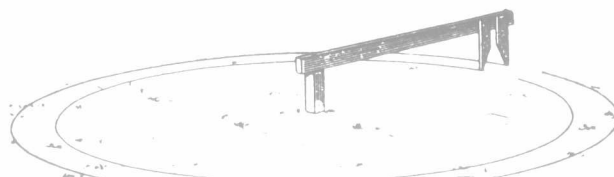


Fig. 1.—Laying off the foundation.

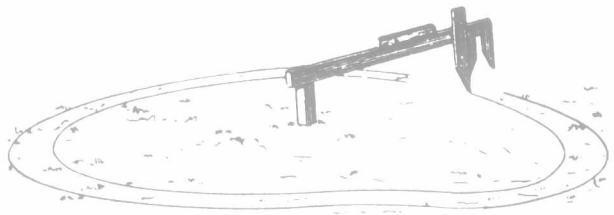


Fig. 2.—Laying off foundation on sloping ground.



Fig. 3.—Ditch for concrete foundation.

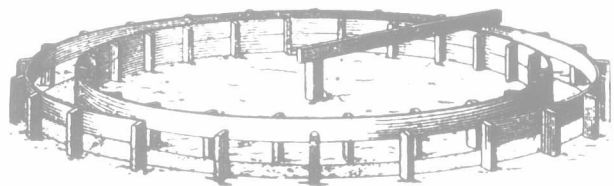


Fig. 4.—Form for foundation above ground, partially boarded up.

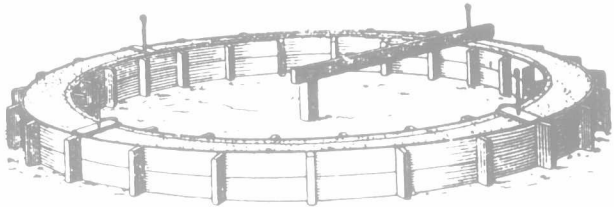


Fig. 5.—Form filled with concrete, showing eyebolts and slats in place and circles to mark position of staves.

these stakes, nailing the boards to the stakes, with the top edge at the marks. Then saw off the tops of the stakes above the boards. The necessity of this sawing may be avoided by driving down the stakes beforehand to the exact height.

After the space from the top board to the ground has been boarded in, drive stakes in a similar manner for the outside form, half an inch from the concrete. Drive these stakes so that the scantling, resting on the center stake and the inside form, as shown in Figure 4, will just clear the tops. Board up these stakes on the inside, making the top of the outer form level with that of the inner.

At several places nail slats across the top of the form to keep the inner and outer circles the proper distance apart. After all the boards are on, the form is ready to be filled with concrete (see Fig. 5).

Four or five eyebolts, half an inch in diameter, and from 20 to 24 inches long, with a hook or elbow on the lower end, should be placed 6 inches from the inside of the foundation, and held in a vertical position by boards fastened across the top of the form. These bolts should extend 8 or 10 inches above the top of the wall. The con-

crete will be filled in around them. After the silo is completed, the staves adjoining the eyebolts will be securely fastened to them.

If the wall extends more than one foot above the surface of the ground, it should be reinforced, by embedding in the concrete, every eight inches, above the surface, and near the outer edge, two or three strands of wire, with ends tied together. After ramming each 6-inch layer of concrete, work a spade between the concrete and the form, to force the coarser materials away from the boards, thus leaving smooth-surfaced walls.

When the concrete is within one inch of the top, finish with mortar made by mixing 1 part of cement to 3 parts of sand, and strike off level with the top edges of the form.

After the concrete has set, and before removing the center stake, mark a line with a nail, pencil or crayon entirely around on top of the foundation wall 3 inches from the inner edge, to show where the inside edge of the staves will come (see Fig. 5).

Next dig out the dirt inside the foundation to 4 inches above the bottom of the wall.

If the earth in the bottom of the silo is firm, and comparatively dry, no provision need be made for drainage, and a concrete floor is unnecessary. Still, such a floor makes the silo easier to clean, and makes it impossible for rats to burrow underneath the foundation wall and gain access to the silage. If, however, the earth in the bottom of the silo is inclined to be seepy, a tile drain should be laid in it, and a concrete floor should be laid above the tile. The tiling should open into the floor at the center, and the floor should be made to drain to it. The tiling should extend beyond the silo wall, and have its outlet lower than the floor. The entrance of the tile drain should be protected in such a way as to prevent the silage from dropping into it.

The concrete floor should be made 4 inches thick, of concrete similar to that used in the foundation wall, and surfaced with mortar made of three parts sand to one part cement.

Western Crop Prospects.

According to the latest reports to date of the Departments of Agriculture for the Western Provinces, estimating the comparative area of wheat and other grain crops sown, the situation in Manitoba is disappointing, particularly so far as wheat is concerned, a net decrease of 208,529 acres being reported. The total for this year is estimated at 2,642,111 acres. There is an increase of 157,051 acres, or about 13 per cent., in the area sown to oats, the total acreage being 1,373,683, as compared with 1,216,632 last year. There is also an increase in the area of barley sown, the acreage being 601,008, as compared with 568,411, an increase of a little over 5 per cent. The area under all grains in Manitoba totals 4,646,614 acres, as compared with 4,809,743 acres last year, a decrease of 163,129. The aggregate for the Province, of all crops sown, including rye, peas and flax, is placed at 4,777,210 acres, as compared with 4,978,630 last year, a decrease of 201,420, or a little more than 4 per cent.

Saskatchewan returns make a more favorable showing. The acreage under wheat is estimated at 3,912,497, as compared with 3,703,563 last year, an increase of 208,934, or about 6 per cent. The acreage under oats is estimated at 2,192,416, as compared with 1,772,976 last year, an increase of 419,440, or 23 per cent. The increase in barley is placed at 5,889 acres, and of flax an increase of 11,107 acres. Taking the figures as they stand, it appears that in Manitoba and Saskatchewan, together, the wheat acreage is increased by only 405 acres; but in oats there is an increase of 576,491, or about 19 per cent. There is also an increase of 38,456 in barley, or about 5 per cent., but a decrease in flax of 15,445 acres. So that, for the two Provinces, there is an increased acreage of all grains of nearly 600,000 acres, or about 6 per cent.

The figures for Alberta are yet to come. The total area under all grains and flax last year was 835,907. Large increases are expected, especially in oats. It is considered likely that the aggregate for all grains will be more than 1,000,000 acres, of which 400,000 will be wheat, and 500,000 oats. This will bring the grand total of the grain acreage up to about 12,500,000 acres, of which about 56 per cent. will be wheat. By the time the figures are finally revised, it is thought that the grand total may be nearer 13,000,000, with about 7,500,000 in wheat. The total wheat area in 1908 was 6,871,736. The effect of the backward spring is evident in these figures.

"The Farmer's Advocate" knife came all O. K., and is a beauty. We think every farmer should read "The Farmer's Advocate." There is always something new and up-to-date, ideas in keeping with the age in which we live. Wishing you every success. W. F. JUSTIN, Hilton Co., Ont.

Hay Caps.

Hay caps have been little used in Canada. The general impression is that they are more bother than they are worth. Perhaps this is true. Perhaps, again, their real worth is not appreciated, for certain it is that most haymakers go farther than is profitable in sacrificing quality to speed.

Ex-Governor Hoard, of Wisconsin, one of the very best dairy farmers in America, strongly contends that hay caps do pay. "In our own experience," he says, "especially in curing clover and alfalfa for both cows and horses, we find that hay cured in cocks under hay caps, is much the most productive of good returns, so that it is richly worth the extra labor to cure it in that way. In curing alfalfa, farmers should remember that it is not like timothy in feeding value. It more nearly approaches bran, has a much higher feeding value than timothy, and consequently should be more carefully handled and cured, if the full value of it is to be saved. When bran is worth around \$20.00 per ton, we believe that it will pay farmers to spend some money and time in making sure of a good crop of alfalfa. When the dairyman has his barn filled with good alfalfa hay, and his silos full of silage, he has a splendid foundation for a good dairy ration, and it does not require heavy grain feeding to produce large flows of milk."

Through his paper, Hoard's dairyman, this wide-awake and observant farmer has repeatedly urged the use of hay caps. They are made as follows:

"The cloth in the cap is made from A-1 sheeting, torn into pieces 40 inches square, and to each corner a large washer, weighing about one-fourth of a pound, is tied.

"The hay is put up in cocks about 75 pounds each, and then covered with the hay caps. The weights that are attached to the corners of the cap tend to keep the cloth tight over the hay, for, as the hay settles, the weights drop closer to the ground. To shed the water well, the cloth must be kept smooth and free from wrinkles; and, to accomplish this, the weights, when the caps are put over the cocks, should be several inches from the ground. This method gives the weights an opportunity to pull down constantly on the four corners of the cap.

"Some have recommended pegs be attached to the corners of the cap, and hook them into the hay to hold the cap over the cock. This system would be all right if the cock of hay did not settle, but since the hay, through settling, would soon pull away from the cap, enough to materially loosen it and cause more or less pockets and folds in the covering, we do not recommend this method.

"The advantage of the hay cap is not only valuable in protecting the hay from the rain, but from the sun as well. The hay can be put up into cocks when it is green and cured in the shade, which is better than drying it out in the sun. Hay cured in this way is more palatable, and retains more of the leaves, because they do not become brittle and break off. The leaves of the hay are the most valuable part of it, and any system that tends to cure them properly, and prevents losing them in the field, is, in our estimation, worth practicing."

Commenting upon the interest in under-drainage manifested by letters and interviews in "The Farmer's Advocate," Prof. Wm. H. Day, of the O. A. College, wrote a fortnight since: "I have just been up in the County of Simcoe for a week and a half, and the interest is at fever-heat." Prospects are for an immense mileage of tile drains being laid in Eastern Canada from this on.



Hay Caps in Minnesota.

A third cutting of alfalfa curing into ideal hay.

The White Campion.

The Pink Family, a large one, of over a thousand species, abounds in insignificant plants, mostly insipid, inodorous and inconspicuous weeds. It does, however, embrace a few species that are noteworthy for their floral beauty or their objectionableness as weeds.

To the former division belong the Dianthus—literally, the flower of Jove—the superb carnation, the old-fashioned Sweet William, and the aromatic clove jelly-flower. In Europe, Spurry is fed to cows and hens, and there, also, are the young shoots of the Bladder Campion gathered for a pot-herb that is said to rival asparagus. As weeds, some of the cockles, chickweeds and campions are well known on both sides of the ocean.

The Bladder Campion (*Silene vulgaris*), recognized by its smooth foliage and inflated calyx, is too well established in some parts of Ontario. By botanists, it is placed in a different genus from the White Campion (*Lychnis alba*), because the latter has two more styles (five altogether) in its flower.

The White Campion is a biennial weed, with



White Cockle, or White Campion.
(*Lychnis alba*.)

Showing flower and inflorescence

opposite, hairy leaves, less glandular-viscid, but very similar in flower and leaf to common, white-flowered, sticky cockle. The calyx is cylindrical, long-toothed, and when growing in the sun, deeply purple-veined. A specimen of the weed, lying on the table where this note is written, has five strong, flowering stems from the root, each about two feet long, bearing a total of 187 flowers; one of its seed-pods contained, by actual count, 161 seeds. It was taken from a meadow north of the London Asylum, which, in the afternoons of this time of year (late June), is as white with Campion as some other fields are yellow with mustard.

Its rather fleshy roots can be subdued by persistent spudding. Rotation with hoed crops will eradicate it.

Tiling in Essex Co., Ont.

Editor "The Farmer's Advocate":

The chief benefit of tile drains on clay soil are that they make the clay more open and porous. They will pay for themselves in three years. Our soil, for the most part, is a black clay on a hardpan bottom. The cost with us for tile is \$9.00 to \$10.00 per thousand. We get them put in by hand for 17 cents per rod; that would be about \$27.00 per acre. We have very little fall, and

put them in by water-level. We use five, six and seven inch for mains, with three-inch tile draining into them. The work is done in spring by hand, with spades, a deep furrow being thrown out with plow to start.

A. PEARSON.

Essex Co., Ont.

Use Pole to Spread Hay.

Editor "The Farmer's Advocate":

We commence to cut our alfalfa as soon as we see it starting to bloom, as we find we have much less loss of the leaves; also, if it is not cut till later, the stem becomes very woody. Red clover we cut when about all out in bloom, and some of the heads are a little brown. Timothy we try to cut just after the first bloom has fallen.

Cut with a five-foot mower, but never cut when grass is wet. If crop is heavy, we ted after dinner what we cut in the forenoon, rake and coil in evening, let stand a couple of days, then draw to mows; load all by hand, unload all with horse-fork; or, if hay is very short, we use the slings that run lengthwise of the load, and work to perfection. In one barn we use the pole from beam to beam to spread hay; it works well, but we keep one man in barn spreading and leveling hay, and put about one pail of salt to two tons of hay. Three good Canadian men, with three horses, can easily draw in their three tons per hour.

Have never used hay caps. One of our neighbors had them five or six years ago, but he has, for some cause, discarded them; he claimed it was difficult to keep them on coils.

For haying, one requires good machinery in good repair, also good horses and good men (not immigrants, as we consider them noncontrollable).

Grey Co., Ont.

E. & C. PARKINSON.

New Type of Grain Thresher.

Just when threshing machinery had been supposed to have reached the height of perfection, the inventor steps in and shows us where we are all wrong, and threatens to revolutionize not only the manufacture of machines, but the work of threshing. J. K. White, of Nashville, Tenn., has been in Western Canada this spring showing the implement men and others a new type of machine, which he invented, and which is being introduced into the wheat fields of the world. The principle of the machine is to feed the cylinder from above and in front, and then to pass the straw and chaff over rapidly-revolving perforated drums, which are arranged to produce powerful currents of air. After passing over these drums, the straw is carried to the stack by the force of the wind developed, thus doing away with the separate stacking attachment. The machine is 12½ feet in length, has a capacity of about 1,000 bushels a day, and weighs less than half the average machine.

Demonstration Farm at Medicine Hat.

The location of a demonstration farm at Medicine Hat, Alberta, has been finally decided on. It is situated within four miles of the city, in a section typical of the conditions prevailing in the district. This year one hundred acres will be broken and prepared for seeding next spring. It is the intention of the Department of Agriculture to make a thorough demonstration of the dry-farming methods known generally in the West as the Campbell system. A manager has been engaged to direct the work of the farm, the chief direction resting with Prof. W. H. Campbell, the apostle of the dry-farming system.

A Roller Hay Rack.

Hay loaders are gradually coming into favor, and where used in connection with a side-delivery rake and a roller rack, give very good satisfaction. Perhaps some of your readers are unfamiliar with a roller rack; it is made on a flat rack, and is really a car running on four wheels on a track on rack; it covers one-half of rack. When starting to load from a hay loader, this car is fastened at back end, and half the load is built; by tripping it and stopping horses, the car rolls to front end, and is fastened, then remainder of load is built behind. One man may easily and quickly build a load this way. This may appear to take considerable time, but it does not.

F. H. W.

Sow thistle (perennial) is causing much trouble and anxiety in these parts. Ten years ago this weed was practically unknown; now, almost every farm has it, more or less. It causes most trouble by seed blowing from one farm to another. One cannot expect to cope with it without co-operation, and it will be a hard matter for farmers to do this, and when they do agree to, the pest will have gained much more headway than at present. Why should not our municipal council take this in hand, without further delay? There would then be some encouragement to fight it.—F. H. Weston, Ontario Co., Ont.

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Some Haymaking Suggestions.

"The Farmer's Advocate" covers a wide field, over which varying seasons and conditions prevail. In some early sections, the four reasons for early cutting of hay given below may be too late to be seasonable, but over most of our territory they probably will still apply.

The first argument for early cutting is to forestall the maturing weeds. Billions of weeds in late-cut meadows ripen and scatter their seed, which, if the field had been mown when the clover was in full bloom, would have succeeded in ripening few germinable seeds. Early cutting of hay is an effective means of fighting weeds.

A second consideration is the advancement of the season's work. While the early-haying weather is often precarious, and the process slow, the curing of a field or two may usually be accomplished successfully by exercising care, together with moderation in the area laid down at once. And this field or two, put out of the way before neighbors have commenced, gives one a fine start in keeping ahead of the work. Late commencement of haying often runs this operation into the harvesting season, putting everything behind, as well as discouraging both manager and helpers.

A third and very important concern is quality of product. Probably most of us can recall a crop of fine clover, cut in full bloom, raked when well wilted, cocked up and left to sweat a day or two, then hauled to the mows, with the leaves adhering, and the heads a wilted crimson. What a treat it was to find that hay in the bottom of the mow, fragrant and dark-green, with the red of the blossoms still showing! The cows felt the same way about it, and you would have known by the milk flow when it was reached! Why is there not a more general determination to make such hay every year? High wages are not a sufficient excuse, for the total cost of curing and putting in hay need not, on the average, exceed two or two and a half dollars a ton, and a considerable proportion of this expense will be incurred, anyway, with the most expeditious methods. The greater feeding value of choice hay well r pays the extra labor of curing it.

A fourth reason for early cutting, that is too often overlooked, is the much greater growth and vigor of the aftermath. The nearer the first crop is allowed to reach maturity, the more tardy and scant will be the second growth. When the second crop is intended for seed, the difference in yield may sometimes amount to more than the total value of the first cutting. In fact, to insure a crop of seed, it is necessary either to pasture a while in spring, or to mow very early. But even when intended for pasture or a second hay crop, the greater yield of aftermath from an early-cut meadow will much more than compensate for the slightly-reduced yield of the first crop from early cutting, leaving the superior feeding value a clear and substantial gain.

All things considered, therefore, the conclusion is irresistible that, while a clover crop contains its greatest nutritive value when shortly past the full-bloom stage, it pays to commence, if weather permits, as soon as, or even slightly before, the full-bloom stage is reached. To wait longer, where any considerable area is to be harvested, is to entail much-too-late mowing of the later fields. Where the meadow is a mixture of clover and timothy, cut it at the stage when the clover is at its best, for, in the farm stable, a ton of good clover is worth more, except for road horses, than a ton of timothy.

Alfalfa should be cut when about one-tenth in bloom, and clear timothy just after the second bloom has fallen.

As with almost everything else, there is a right and wrong time to use the tedder. The right time is soon after the mower has laid the swath. Then the tedder will shake it up without breaking off the leaves. By keeping the green-cut stuff loose and open, the air is allowed to circulate through it, drying all parts evenly—air-curing, as it were. This makes choice hay. The wrong time to ted is when the hay is so dry and crisp that a tedder will rustle off the leaves. This is a most serious loss, for the leaves are the most valuable part.

There are two reasons for keeping the leaves on the hay. The green leaves are the most effective means of evaporating the sap. When they become brittle and fall off, this function ceases, leaving the stalks apparently dry enough, but really full of moisture. And besides, as pointed out above, the loss of the leaves greatly reduces the feeding value of the crop.

A little sap will not spoil a mow of hay, for, as a matter of fact, the driest fresh-cured hay contains quite a considerable percentage of moisture; but beware of a very little extraneous moisture, whether dew or rain.

Build hay cocks to shed the rain. Do not turn together the outer ends of a couple of rakes, and perch a dab of a forkful on top, calling it a cock. The bottom of the coil may be formed this way, but on top of this several successive forkfuls should be squarely placed in such a way as to cause the outer ends of the stems and leaves to droop downwards, thus shedding the rain as a stack would. Alfalfa coiled on this principle, while tough, will shed a week's rain, with far less damage than one would anticipate. In fact, we have known it to make fairly appetizing feed after such a siege.

The hay loader is undoubtedly a useful implement, especially for handling timothy, and at

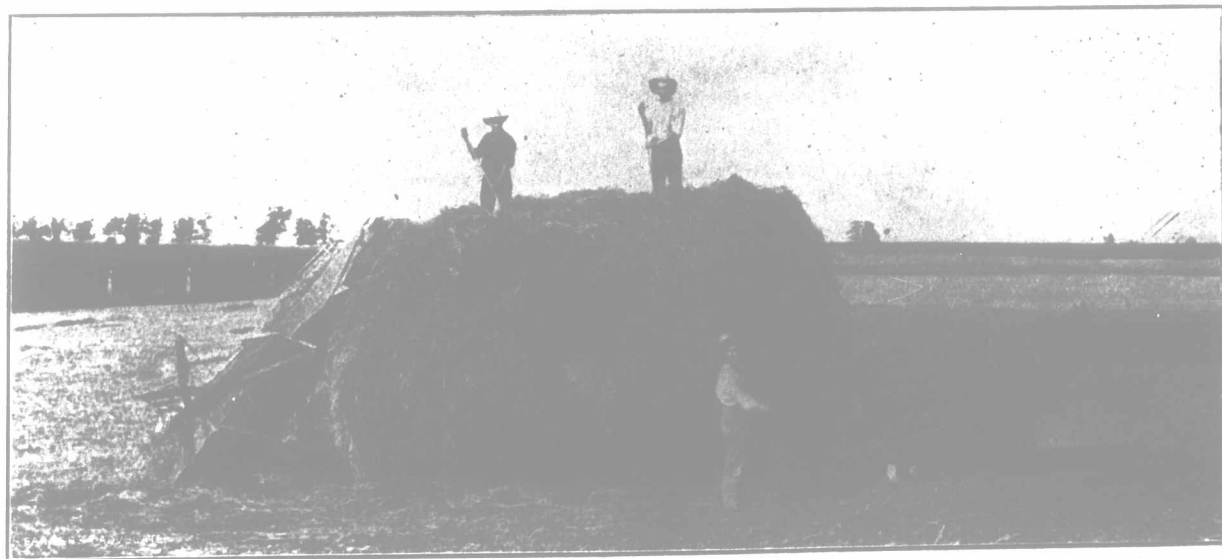


The Easy Way of Unloading.

Photo on farm of Fred Luck, Brant Co., Ont.

times may be employed to advantage for clover and alfalfa, but, as a general practice, in the early part of the season, when weather at all permits, the old-fashioned method of haymaking will pay. It takes more time, but the labor will be well rewarded. Time may be dear, but bran is dearer. Better hay and less millfeed, is a good motto.

The greatest material problem of the United States is not in the development of the waterways, not in the preservation of forests, and not in the conservation of our coal and iron, important as these all are; but the problem that is vastly greater than all of these is to bring about the adoption of systems of farming that will maintain or increase the productive power of American soils.—(Cyril G. Hopkins.)



Hay Loader on Farm of Fred Luck, Brant Co., Ont.

Loader takes hay from the swath, which Mr. Luck says he finds to make very good hay, if taken in before it has dried too much, and with no rain or dew on it when lifted. The load is on a low-truck wagon, which is best for loader, and was put on in about 12 minutes.

THE DAIRY

The Next Best Thing.

Certainly, the margin between dairy and creamery butter has been growing less from year to year, but I am not prepared to say that the hand separator is responsible for this. Prices for creamery have been, on the average, much higher since the hand separator came into general use. The same condition holds good in dairy. The ideal creamery is the whole-milk system, but this is impossible in many districts, and the hand separator on the farm is the next best thing. The average farmer does not produce as rich a cream as he should; indeed, about nine out of ten produce a thin cream.—(Jno. McQuaker.)

Mixture Spoiled by the Worst.

Editor "The Farmer's Advocate":

The advent of the hand separator has had the result I anticipated, viz., it has put the butter trade of Canada just where it was 25 years ago, or, when all of our butter was made at the farm dairy. This should not be the case, but, as a matter of fact, it is.

My reasons are these: Many farmers who know how to make first-class butter will not take the pains necessary to produce that article, or produce cream that will. There are also some farmers who really do not know how to handle milk or cream, without spoiling it for anything but pig feed; while, on the other hand, we have dairymen who understand, and who do take pains, and produce a first-class article of both butter and cream. But, when all these qualities of farm-separated cream—good, bad and indifferent—are mixed together, first-class butter cannot be made out of it. At the present time, I think the only way first-class butter can be made in Canada is to have the patrons deliver the whole milk at the creamery every day. The cream produced by the average farmer is not of a high enough quality to make a first-class butter. This should not be the case, for I claim there is no place so favorable for the production of choice cream and butter as the home dairy, for the dairyman has all conditions under his control; but, as a matter of fact, he either does not know how, or will not take the pains.

I do not consider dairying is going ahead in Canada the way it should. It cannot be for lack of knowledge. Our splendid agricultural papers, Farmers' Institutes, and conventions of all kinds, are scattering the very best kind of information broadcast; but, in spite of this, there is a lukewarmness that must be got rid of. Either our dairymen have got to improve their methods voluntarily, or we have got to have more stringent

regulations for our cheese factories and creameries, if we achieve the success that awaits us.
Leeds Co., Ont. W. H. McNISH.

Misrepresentations of Separator Salesmen.

Editor "The Farmer's Advocate":

In regard to farm separators causing creameries to accept a lower price for their output, I can't see it in my case; it may be so some places. If the farmer is instructed how to care for his cream, and the creameryman has a standard at the factory, the farmer knows that if his cream is not up to the mark it will not be accepted.

My creamery is altogether a cream-gathering concern, and my output commands as high a price as that of the whole-milk creameries around me. Competing with them at dairy shows, I have won prizes.

I think that dairy butter has had a greater influence on the reduced price. If it is the case that separators have obliged creameries to accept a lower price for their output, the fountain of the cause is on the farm. Separator agents will come along and tell the farmer almost anything, if it will cause a sale. The idea of stating that they only need washing once a day, or once every other day! The agent should have butter made from a separator run in that manner, and be forced to use it. Again, they have the separator set to skim far too thin a cream, making the farmer believe, or rather trying to, he is getting so much more cream from his milk. A thin cream is more trouble to keep sweet, and a larger amount to take care of, than a thicker cream—the quantity of fat the same.

If the farmer washes his separator after each using, skims a 30-per-cent. cream, or more, cools it immediately, and mixes no warm cream with the previous separations until it is cooled, and the creameryman gathers every other day, I cannot see why a first-class article cannot be made.

These few notes are from my experience in my own creamery. Others may see things in a different light.
H. E. WILSON.

Middlesex Co., Ont.

Fresh-cream Cheese at O. A. C.

During June, at 3.30 p.m., when milking at the O. A. C. dairy begins, an interested throng of excursionists pours through the stables to view the sleek Holsteins, Ayrshires and Jerseys brought in from the pasture. Much interest is manifested in the individual cow records for the previous year, which are to be seen on cards pasted up behind each cow.

The creamery, which is run as an ordinary commercial creamery, was another center of attraction. Patrons are charged three cents per pound of butter-fat for manufacturing, one cent additional if hauling is done. Professor Dean reports that, for May, patrons were paid, net, 25½ and 26½ cents per pound of butter-fat.

In the cheese factory a new departure has been made. One end of the building is this year devoted to the manufacture of soft, fresh-cream cheese. This cheese is made in three grades, from whole milk, from 20-per-cent. cream, and from cream containing 40 per cent. butter-fat. Each grade is packed into neat, parchment-paper-lined cardboard boxes. The little box of straight-cream cheese contains about four ounces, the double cream about five ounces, and the box of whole-milk cheese about a pound or more. No weight is guaranteed, however. These are sold at present for 10, 15 and 20 cents, respectively. There is no ripening process, and no old flavor. The cheese is shipped as made to dealers in the large cities, and usually reaches the consumer inside of two weeks from manufacture.

New Idea in Milk Cans.

To prevent dealers from adulterating the milk received from producers before it is retailed to consumers in the city, a can has recently been devised that is said to effectually prevent the introduction of anything after the can is once sealed up.

It is a can with an hermetical seal, and an apparatus for drawing off the contents in composite samples of uniform quality, by means of sterilized compressed air. Its avowed purpose is to prevent adulteration and contamination of the contents during transportation and sale.

The can will be filled, sealed and locked at the dairy where the milk is produced, and will not be unlocked or opened until its return to the same dairy for cleaning and sterilization. The fittings, provided to permit the removal of the contents of the can at the places of sale, are light brass tubing fitted inside and outside. There are check valves that prevent removal of the contents, except at the proper exit, and that prevent adding liquid or other materials to the can ahead of its return to the dairy. If, for instance, water is forced in, the can will refuse to work. It is emptied without opening. Sterilized air, under

moderate pressure, forces out the milk when it is needed. And the application of this air gives a thorough mixture of the milk before any sample is drawn, so that the samples in each part of the can are of uniform quality.

What next?

GARDEN & ORCHARD

Thinning an Essential of Orchard Practice.

Paper by F. H. Johnson, read before the Nova Scotia Farmers' Association, January, 1909.

A large proportion of the apples grown in the Province of Nova Scotia are undersized, and not fit to be placed on the market as No. 1 stock, due, in a great measure, to the trees being overloaded, and not able to bring the fruit to full maturity. This means a considerable loss in cash returns to the grower. It costs as much to place a barrel of No. 2 apples on the market as a barrel of No. 1's, the No. 2's bringing from 2 to 4 shillings less per barrel. The lower grades are almost worthless, scarcely paying for the handling, and, if placed on the market, cause more loss indirectly than the small amount returned for them.

If part of the apples of an overloaded tree are picked in the early part of the growing season, the remaining ones will have a better chance to develop and grow to a larger size. The apples being farther apart, admit the sun, with the result of better-colored fruit.



Everlasting.

Champion Ayrshire bull at Ayr, Scotland, April, 1909.

As many barrels of fruit will be gathered from a tree that has been properly thinned as though the full amount had remained to the end of the season, the increase in size making up for the loss in numbers.

In British Columbia the fruit is thinned in June. Our season being two or three weeks later, would bring it in July, or as soon as the usual drop is over. Low trees can be handled with a step-ladder; for ordinary-sized ones, a light picking one answers best, being placed against the tree as in picking.

Having no basket in the way, the work can be done quite rapidly, using both hands, and dropping the apples on the ground. All wormy, deformed and spotted ones should be removed; also, clusters of two and three broken up, never leaving more than one apple in a place, and from four to six inches apart.

Do not be afraid of taking off too many; the chances are more will be left on than should be.

The work should be done in a thorough and systematic manner, taking a row at a time, and working through the orchard. Some varieties, as King, Golden Russet and Nonpareil, will not require much thinning—only enough to break up clusters and remove defective ones. Such varieties as Gravenstein, Baldwin, Spy, and other heavy bearing ones, will need a large number removed when they are bearing full.

Thinning can be done more easily when the trees are kept well pruned on top, and not allowed to run up high; also, side branches that are growing into the next tree should be cut off, so there will be an open space all the way around the tree to work the ladder in.

Thinning encourages annual bearing. We learn from scientists that the greater part of the vitality taken from the tree is stored in the seeds, the increase in size being mostly water. As a small apple has as many seeds as a large one, the tree is exhausted nearly as much in growing a small apple as a large one. A barrel of No. 3's has from two to three times as many apples as a

barrel of No. 1's, so that in growing No. 1's, instead of No. 3's, the tree is exhausted less, and is in better condition to produce a crop the following year. It is better to have a tree produce five barrels every year than ten barrels alternate years, being less drain on the tree, and not bringing all the apples on the market in a year of large crops.

The time spent in thinning will be gained in the picking and packing. If all the apples are left on the tree until fall, they will have to be picked in baskets, carried from the tree to the barrel, and carted to the packing-house, there to be handled over again at the time of packing. Large, even-sized apples can be graded and packed much faster, and give a better article when placed on the market than ones that are uneven in size and quality.

In British Columbia, where all the fruit is packed in boxes, the thinning of apples, pears and plums is regarded to be as necessary as any part of the orchard work, most of it being done by Chinamen paid at the rate of a dollar and seventy-five cents a day. With labor at that price, the cost of thinning is not regarded as excessive.

If we expect to make a success in boxing apples for market, we must thin them on the tree, so they will be large, even-sized, free from spots and blemish. Unless we do this, we will find a large part of our apples not fit to be packed in boxes. Size is very important in apples boxed for the English market, one half tier per box making a difference of one shilling and sixpence.

First-class apples will always find a ready sale on the market, giving satisfaction to the buyer and seller. It is the poor grades that are difficult to dispose of, and return so little for the trouble of growing.

By thinning, we get rid of a large portion of the poor grades, making our apples easier to handle, giving more money to the grower, and better satisfaction to the consumer.

No intelligent farmer would put twice as many cattle in a pasture as there was feed for; yet we are doing the same thing by allowing our trees to carry two or three times as many apples as they can bring to proper maturity.

Thinning should not be regarded by the orchardist as an experiment. It is as practical as any part of the orchard work, and, if properly carried out, will help to meet the demands the market is making each year for better fruit.

In our present methods of caring for the orchard, we are doing fairly well. Let us add thinning to the list, and keep up the reputation our apples have earned.

Okanagan Fruit Union.

A number of prominent Okanagan fruit-growers have formed an Association for the disposal of their fruit, to be known as the Okanagan Fruit Union, Limited. Among those prominently associated with the enterprise are W. C. Ricardo, John Kidston, R. H. Augur, E. M. Carruthers, and W. T. Shatford. The declared intention of the Union is to handle the fruit of the valley, from Sicamous to the boundary line, and adjacent centers, to keep tabs on the markets, and so regulate the delivery of fruit thereto as to prevent a glut or a famine; the development of the natural markets, and securing exact information as to demands; keeping a sharp lookout for all competitors, and the erection at various points of canneries, cooling and evaporating plants. Later on it is proposed to erect cold-storage plants at outside centers.

The promoters propose to finance the proposition by issuing stock to fruit-growers at \$50 a share, with a first call of \$20. There are no promoters' shares, neither is there an issue of debentures. The Union will be governed by a board of directors made up of representatives from the various centers, who will have absolute control, and will work through an executive of managing directors and an office manager.

Ten per cent. will be charged on fruit sold on commission, and packing will be done for members at cost. After six per cent. of a dividend is paid on the stock, the balance of the profits will go into a reserve. The Union will guarantee the growers against bad debts, and payment will be made by the Union as follows: Fifty per cent. on the fifteenth of the month following the time

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of sales; twenty-five per cent. twenty days later, and the balance sixty days later.

Fruit going to the canneries and drying plants of the Union will be bought at a fixed price. In this way, the second-grade fruit can all be disposed of.

The public naturally look with favor upon any proposition which appears to offer a solution to the problem of packing, grading and marketing the fruit, but, following closely upon the failure of the B. C. Fruit and Produce Exchange, are naturally slow to enthuse, and apparently wish to be shown.

However, the men behind the enterprise are men of experience in financial matters, as well as being specialists in the growing of fruit. They are men of large affairs and well-known integrity, and at the outset have been successful in securing the services of a man who has been engaged in handling the fruit crop of the Yakima country for some years, at a very satisfactory profit to the growers there. If the Okanagan Fruit Union is a success, it will go a long way toward putting the industry in the Okanagan on a firm business footing.

Following close upon the formation of this fruit selling organization, comes the announcement that a company has been formed to build an electric railway through the Okanagan. If carried to a successful issue, this will also be a large factor in the development of the district. In the fruit-growing sections of Washington, particularly in the vicinity of Spokane, electric roads are quite common, and are materially assisting in the growth of the fruit industry.

E. W. D.
British Columbia.

Fire Blight.

A diseased condition of apple trees, recognized by the scorched, either reddened or blackened condition of the leaves on certain branches or twigs, is not infrequently mistaken by orchard owners for the effect of lightning-stroke. Those who have studied the disease have determined the cause to be bacterial. Fire-blight is an appropriate name for it, on account of the effects above referred to, but the disease is more generally spoken of as pear-blight, because the pear seems to be more susceptible to it than the apple, quince or hawthorn, none of which are immune.

M. B. Waite, Pathologist to the U. S. Department of Agriculture, who has made a special study of this destructive pome-fruit disease, is of opinion that the bacterial infection enters the trees most commonly through the flowers at blossoming time, bees and other insects being the chief agents of distribution. Some infections occur through tips of growing shoots, and a still smaller number directly into the fleshy bark.

In the vast majority of cases, the infections simply kill the blossoms or a few inches of the twig, but occasionally the bacteria spread and kill whole branches, and sometimes even the whole tree.

Not all varieties of pear and apple are equally susceptible. Mr. Waite makes the unusual generalization that the conditions most favorable to the growth and vigor of the trees are also most favorable to the infection and progress of the disease-germ. Favorable weather, heavy fertilizing, good cultivation, favor the blight, on account of the increased succulence of the tissues.

The germs are short-lived; they die out in the killed twigs and branches, but keep alive in the slowly-advancing margin of the affected portion. It is these margins, according to Mr. Waite, which are the sources of re-infection in the following spring.

Sometimes a tree becomes infected through cracks in its bark, either of branch or trunk. It then spreads laterally, as well as vertically, and may really girdle and kill the tree. It may be infected at the ground or below the ground line, in which case it is known as "collar-blight." Mr. Waite states that more trees—pears, particularly—are killed by collar-blight than by branch-blight.

In July and early August is the time when the effects of the disease are most conspicuous in the orchards.

Remedy.—Cut out all the blight from the trees, and save all the healthy parts that can be saved. All small limbs affected should be cut out entirely. Blight completely kills the bark which it reaches, but leaves the rest wholly uninjured.—(Waite.) When blighted bark is removed from trunk or branch, the scraped part should be washed with a bactericide to kill the germs that are sure to adhere. The cutting and scraping tools should also be sterilized after every operation. For these purposes, Mr. Waite recommends a solution of corrosive sublimate, the sixth part of one ounce in a gallon of water, applied with a sponge. It is hardly necessary to add that all cuttings should be carefully collected and burned.

Lime-sulphur Prevents Leaf Curl.

Editor "The Farmer's Advocate":

I herewith enclose photographic prints of two peach trees I made towards sundown the other evening, which shows the results of spraying.

No. 1 peach tree (Elberta variety), sprayed with lime and sulphur, foliage dark-green and healthy, good set of fruit, which is developing nicely.

No. 2 peach tree (Elberta variety), unsprayed, foliage was heavy, but badly attacked with the leaf-curl fungus; set of fruit was good, but the tree has strewn the ground with the diseased leaves, and is preparing to set forth a new set of



Elberta Peach Tree, Unsprayed.

Losing fruit and first set of foliage, from curl-leaf.

leaves and drop all of its curled leaves. In the meantime, it also drops its set of fruit.

One object-lesson like this teaches us the value of thorough spraying as a preventive of leaf-curl, as in cold, wet springs, as this season was, all varieties are always more or less affected with leaf-curl; whereas, if spring had come up warm and dry, the ill-effects would not be so noticeable. Many fruit-growers who this year put off spraying, as the ground was too wet, and then, when season advanced, neglected to do a thorough job, or many who did not spray at all, will find, as others before have found out, that spraying of trees is just as necessary as and sometimes more necessary than cultivation and pruning, and, to make a success, none can be neglected.



Elberta Peach Tree, Sprayed with Lime-sulphur.

Foliage healthy and free from curl-leaf.

This is a fair sample of the orchards right through this district, from the Niagara River to Hamilton, and shows that even the San Jose scale was not such a curse as some people think, for many growers some ten or twelve years ago had a very large acreage of peaches, and if the season was favorable they flooded the market with inferior trash. Since the advent of the scale, these neglected orchards are dead, and the spraying with lime-sulphur solution insures a crop almost every year on some varieties, barring winter-killing of buds, which is not as common in this district as supposed. The bad effects of the leaf-curl, before spraying was adopted, is to be blamed for the almost total failure in some orchards in certain seasons.

Lincoln Co., Ont. GEO. A. ROBERTSON.

Tiling Pays on Sandy Loam.

Editor "The Farmer's Advocate":

My experience with tile drainage is rather limited. My soil is a deep, sandy loam, rather rolling, and surface drains very easily. Nevertheless, I have found tile drains a very profitable investment in some of the lowest parts of my orchards and berry plantation. In a wet season, peach trees will not survive if soil is oversaturated with water for any length of time; so, in a peach orchard, it means that some places must be tiled, in order to have a solid block of thrifty, healthy trees. In the fall, 1906, I did a little tile draining, which cost me three cents per foot for 3-inch tile, digging and filling. In my soil it can be done for less by using a plow and getting tile in car lots, as I paid \$15 per thousand. Nearly all my neighbors are tile-draining as fast as possible; there is no debating the question as to whether it pays. It means the difference between success and failure in most soils in our neighborhood, especially if intending to go into fruit-growing. There were no oats sowed here before May 24th, except here and there a field which had been tile-drained. S. H. RITTENHOUSE.
Lincoln Co., Ont.

Irrigation Experiments with Vegetables.

A. McMeans, who has charge of the vegetable division of the Horticultural Department at the Ontario Agricultural College, hopes to improve varieties of cabbage by carefully selecting the best specimens and growing his own seed. He will conduct experiments in this line, also, with corn, peas and beans. Irrigation for strawberries and vegetables is to be tried this season. The plan to be used is known as the Skinner system. In- to a set of overhead pipes water is forced under a pressure of 30 pounds. Through small openings in the pipes every four feet, the water will fall in a shower on the plants below.

The onion-growers of the Leamington district had their first sowing drowned out. They have re-sowed, however, as late as the 24th of May. The Scotland (Ontario) onion-growers are this year putting up a large storage building, 50 by 100 feet, and will sell co-operatively. All onions will go out inspected.

POULTRY

Fattening Chickens.

Many farmers market their poultry in a thin condition. The manager of the Poultry Department of the Ontario Agricultural College claims that they can, for the time it takes to feed, clean out the pens, etc., make at least 50 cents per hour over and above cost of food. The birds are usually fed by lamp-light at night, so little time is lost.

On a ration of barley meal, low-grade flour, middlings and buttermilk, together with some other mixed grains, and a little shredded wheat, 626 birds, fed, some for four days, and some as long as three weeks, consumed 2,057 pounds of ground grain, and 4,000 pounds of milk.

FINANCIAL STATEMENT OF FATTENING CHICKENS.

626 chickens weighing 2,233 lbs., at 8c.	
per lb., live weight	\$178.64
2,057 lbs. grain, at \$1.50 per cwt.	30.85
4,000 lbs. buttermilk, at 10c. per cwt.	4.00
Total cost	\$213.49
624 dressed chickens, bled and plucked, undrawn, 2,358 lbs., at 12½c. per lb.	\$294.75
Profit	\$ 81.26

Birds that are starved, ready to kill, shrink nearly 12 per cent. by bleeding and loss of feathers. We have figured frequently that the average profit per bird in three weeks' feeding was about 15 cents each; the above table shows nearly 13 cents. The profit would have been somewhat higher if all the birds had been fed at least two weeks.

From Coop to Roost.

Chickens, like human beings, are creatures of habit. The coop, which has to them been a safe shelter at night while they were small, is still reckoned home long after the hen has left them. Cases are known where a whole dozen have grown so big that the coop was scarcely large enough to hold them, but night after night they would crowd in, and then one fine morning the whole lot would be found dead, smothered for lack of air. Even where no such calamity befalls, the health and vigor of growing chickens must be injured by overcrowding. When they are well feathered they should be induced to change their quarters, and to go at night to the roomy henhouse. They can

be taught to do so more easily than later. Most people have vivid recollections of the difficulty of getting chickens to leave the apple trees and join the other fowls on the hen-roosts as winter draws near.

Pleased with Colony-house Method

The method of raising chickens in the corn field, altogether away from the buildings, which Professor W. R. Graham, Poultry Manager at the O. A. C., Guelph, fairly stumbled upon a few years ago, is in more favor than ever. In fact, all the chickens, in the College Poultry Department, except the very early ones, are now reared in this way, though pasture fields and others besides corn fields are used for the purpose. A colony house is hauled to a convenient place, and becomes for the summer the home of a batch of chickens. If the chickens are without mother hens, a brooder is attached to the side of the colony house, and when the chicks are large enough, is removed, leaving them to roost in the house. Where hens are with the chickens, no brooders are needed, the house proper serving all purposes. No enclosing fence is put around, the chicks wander at will, but the houses are closed every night to keep out skunks and other night marauders. What food is given them is put into a self-feeder, and they help themselves.

It is hoped to evolve a colony house which will fill the bill for winter, as well as summer.

An old gentleman present remarked that never since he could remember was such an interest taken in fowls. The reason is not hard to find. Prices are high. For broilers, at the time of the horse show in Toronto, Prof. Graham received 45 cents per pound, alive. As late as the second week in June the quotation was 27½ cents per pound.

Experiments are being conducted at present to determine the vitality of chickens hatched in the natural way, and in the different styles of incubators.

THE FARM BULLETIN

Toronto Business Men Visit the O. A. C.

The June Farmers' Institute excursions to the Ontario Agricultural College were varied this season, by a rather unique departure. On June 19th two hundred members of the Canadian Club, of Toronto, on invitation of President Creelman, visited the College. It is needless to say they were delighted with what they saw and heard. Very few of the visitors had seen the College before. They had a kind of vague idea that they would see a large farm, well kept, on which were to be found a few buildings suitable for teaching and demonstration purpose. But when they were taken through department after department, from the dairy to the Macdonald Institute, and saw the splendid equipment and facilities provided for educating the farmer's boys and girls, only words of the highest praise were heard, and the farmer's calling rose several notches in the estimation of these citizens of Ontario's metropolis.

The climax of an exceedingly pleasant and profitable outing was reached when the visitors lined up on the College campus to partake of the luncheon prepared by the staff and students of the Macdonald Institute.

Such occasional intermingling of city and country life cannot but be productive of mutual benefit to all concerned. Canada is an agricultural country. Upon the farmer depends to a very great degree the prosperity of the city and town. If he fails in his undertaking the professional or business man cannot hope for the greatest success. If this fact were always uppermost in the minds of the people of the city, many of them would have a higher appreciation of the farmer and his calling than they now have. W. J. W.

South Simcoe Notes.

Things are looking fairly well in this section (Union Township, S. Simcoe). Of course, we were late getting in the seeding on account of wet spring, and farmers have come to the conclusion they will have to use more tile. I think there is more summer fallowing being done this year. Those who depended on getting stubble in to wheat last fall have not had good results, so are preparing by fallowing. The mangels have not come up very well, on account of the dry spell just after sowing, and many are being plowed up, and turnips sown. Hay will not be so heavy as was looked for earlier in the spring; after so much wet, the grass seemed soft, and could not stand the hot sun, and the ground baked very quickly, but clover seems to be blooming very well, and late showers have helped the late crops, so the farmers seem hopeful.

Simcoe Co., Ont. L. N. MORTON.

Season Satisfactory, Though Late.

The Census and Statistics office has issued a report on the crops and live stock of Canada, as reported at date of June 15th. In all parts of Canada farm operations have been delayed this year. The months of April and May were cold and wet, and farmers were able to get on the land late and at intervals. Where fall wheat had been sown it suffered much injury from hard frosts, and spring operations on the land have been two to three weeks later than usual; yet the reports from all the Provinces are very satisfactory. Grain crops and grasses are growing thriftily; and, except in some localities of the Maritime Provinces, where the rainfall has been light, there is promise of an excellent harvest.

Wheat, the great staple crop of the country, has a reported area of 7,750,400 acres, which is 1,140,000 acres more than last year. In the Maritime Provinces and Quebec there is little change, but in Ontario the area is less by 106,600 acres, of which 88,300 acres is fall wheat. Manitoba, Saskatchewan and Alberta show an area of 6,872,000 acres, being 1,254,000 acres more than last year. The condition of fall wheat at 15th June was 82.15, and of spring wheat, 92.15 per cent. of the standard for a full crop. The area of oats in the Dominion is 9,302,600 acres, which is 1,361,500 acres more than last year, and its condition is reported as 92.32 per cent. Barley, the cereal crop next in importance, has a total area of 1,864,900 acres, or 119,200 acres more than last year, and its condition is 91.19 per cent. Rye and peas are less than last year, with conditions of 87.90 and 90.59, respectively. Mixed grains, with 582,000 acres, and hay and clover, with 8,210,300 acres, are practically of the same extent as last year. The former has a reported condition of 91.71, and the latter of 90.36 per cent. The condition of pasture is 93.55 per cent.

The Province showing the largest area of oats is Ontario, with 3,142,200 acres, and also the largest area of hay and clover, with 3,535,600 acres. Quebec is next highest in hay and clover, with 2,923,600 acres. This Province has also 1,574,100 acres in oats. Saskatchewan has 1,847,000 acres in oats; Manitoba, 1,390,000 acres, and Alberta, 820,000 acres. In the three Maritime Provinces the total area in oats is 529,300 acres.

At the end of June, 1906, there were 122,398 farms in the Provinces of Manitoba, Saskatchewan and Alberta, and at the end of 1908 the homesteads entered, less all cancellations, increased the number to 190,231, or by 10,853,760 acres. In Manitoba the net increase of the two and one-half years was 4,393; in Saskatchewan, 41,423, and in Alberta, 22,020; but these figures do not take account of farm lands purchased from railway companies and other corporations in the same period. The large increases in Saskatchewan have been made in the regions south of the main line of the Canadian Pacific Railway, and in the western and northern districts. In Alberta they have been made south of the Canadian Pacific, and in the eastern ranges of townships north of the railway.

The drought of summer and autumn was less severe last year than in 1907, but it had the effect of again reducing the numbers of farm animals in the older Provinces. In the whole of Canada horses exceed the number of last year by 14,324; whilst milch cows are less by 68,440; other horned cattle by 245,057; sheep by 126,014, and swine by 457,349. The largest falling off in the east occurred in Quebec and Ontario. In Quebec milch cows are fewer by 28,317; other horned cattle by 45,705; sheep by 30,650, and swine by 81,294. In Ontario horses are fewer by 38,018; milch cows by 41,268; other horned cattle by 144,665; sheep by 86,685, and swine by 361,618. In Prince Edward Island, Nova Scotia and New Brunswick horses are fewer by 1,921; milch cows by 3,577; other horned cattle by 20,115; sheep by 31,123, and swine by 9,316. In Manitoba, Saskatchewan and Alberta the number of horses is more this year than a year ago by 42,278; milch cows by 4,721, and sheep by 22,844. Other horned cattle than milch cows decreased in these Provinces during the year by 34,482, and swine by 6,121.

Lake Erie Counties Prosperous.

A staff correspondent of the Toronto Globe, travelling through the Ontario counties bordering on Lake Erie, found everywhere evidences of prosperity on the farms, not only evidenced by fine houses and outbuildings, but in the increasing use and value of the land, and a waning demand for loans for the purchase of land and improvements, which farmers are paying for out of their own accumulations. A feature of the present season is the erection of new buildings, many barns going up valued at from \$1,500 to \$3,000 each.

St. John, New Brunswick, papers report that application for space at the Dominion Fair, to be held in St. John next year, are already being received from points in Upper Canada, as well as the Maritime Provinces.

The Drag in Dorchester.

A stretch of earth road in North Dorchester Township, Middlesex Co., Ont., being well-nigh impassable during the past wet spring, James Weir, who had made a study of the split-log-drag method of road maintenance, as described in "The Farmer's Advocate," decided to put the principle into practice. He constructed a drag 9 or 10 feet long of two parallel rock-elm planks, 2 x 12 inches, 18 inches apart, and held in position by a couple of stout braces mortised through the planks, the ends projecting a few inches behind the rear plank, to catch the ends of the drag chain. The latter passed through two holes cut in each of the planks, so that the team drew on the back plank, and the drag could not pull apart. The heavy chain was hooked in front so as to draw the drag on an angle. Mr. Weir was very much pleased with the improvement so quickly and easily effected in the condition of the road, the crowning and smoothing letting away the water, which works havoc with driveways. On the particular soil in question, he obtained the best results when the surface had passed the stage of being very wet and sticky. He also found its use decidedly advantageous in levelling up and filling any holes filled with water on a short piece of road surfaced with gravel. In his judgment, many roads could be kept in excellent condition very economically by the regular use of this simple road implement.

Some 1909 Fair Dates.

Alaska-Yukon-Pacific; Seattle, June 1 to Oct. 15.
Inter-Western Pacific Exhibition; Calgary, Alta., July 5 to 10.
Winnipeg Industrial Exhibition; July 10 to 17.
Inter-Provincial Fair; Brandon, July 19 to 23.
Regina Industrial Exhibition; July 27 to 30.
Canadian National Exhibition; Toronto, Aug. 28 to Sept. 13.
Western Fair; London, Sept. 10 to 18.
Canada Central; Ottawa, Sept. 10 to 18.
Sherbrooke, Que.; Aug. 28 to September 4.

Members of the Ontario Government, last week, under the auspices of the Provincial Department of Agriculture, paid an official visit to the 100-acre Horticultural Experiment Station at Jordan Harbor, in the Niagara District. Inspection of the institution followed a novel fresh-fruit luncheon, the product of the farm, served in the superintendent's residence. The party also took occasion to visit the Vineland and Rittenhouse public schools, at both of which school-gardening has been made a most successful feature.

Large quantities of superphosphates are being imported into Australia from Japan, but by the time the cargoes reach the Southern Hemisphere the phosphates have so solidified in the holds of the vessels that they frequently have to be dug out with pick and shovel. The work is hard and attended with risk to health, owing to the fine dust charged with arsenic that fills the holds of the ships. The evil effects are so serious that the Customs Department has considered the advisability of prohibiting the importation of superphosphates in bulk.

Hon. Jules Allard, Minister of Agriculture in the Province of Quebec, has been investigating the probable cause of the great destruction of timber limits by fire. Examination of reports of the forest rangers has convinced him that the origin is in many cases due to careless new settlers setting fire to wood on their lands to effect clearances. It is reported that Mr. Allard has referred the matter to the law offices of the Government, to have a statute drafted that will be passed at the next session of the Legislature, to deal with the question. It is said that he is determined to put an end to such fires, even though necessary to have a law that will make the offence a criminal act.

Brazil is taking a keen interest in the work of the Dry-farming Congress, and will be represented both with exhibits and delegates at the fourth sessions, at Billings, Montana, next October, 26th to 28th. Dr. Laurence Beta-Naves, Chief Engineer of the Technical Department of Public Works and Industries in Brazil, has been appointed Corresponding Secretary of the Dry-farming Congress.

The St. John Telegraph says: "It is now announced that Deputy Commissioner of Agriculture, Thos. A. Peters, is to be dismissed, and a new office of Secretary created, which is to be handed out to W. W. Hubbard, Conservative organizer of the Province.

The Mail-Herald, of Revelstoke, B. C., says a reduction in fruit-freight rates, running from five to seven cents per hundred on car lots, has been announced by the C. P. R. freight department, to be effective for the present season's shipments.

International Horse Show.

Reports agree that the third International Horse Show, held at Olympia, London, England, June 5th to 15th, was graced by probably the largest and best display of equines ever assembled under one roof, 2,500 entries having been made for the £12,000 prize-money and cups. Some of the best United States, Canadian and European stables were pitted against the pick of the British show animals, and each class was judged by one American, one Englishman, and a representative of France, Italy, Holland or Belgium. Commendable as this arrangement might be considered from the standpoint of impartiality, it does not seem to have conducted to despatch or efficiency of judicial work. As for the earning of national honors, while winnings were creditably distributed, the net result may be fairly called a triumph for British breeding. As an English paper puts it: "From leaper and hunter to Hackney, from polo pony to trotter, there is but one story to tell, and that is that, come whence they did, the fore-runners of the exhibits now placed before us originated from the Midlands, from Norfolk, and Yorkshire, and from Ireland."

Great enthusiasm was aroused in the display of English and American draft horses. Last year it was Armour's gray six-in-hand; this time, the six Clydesdale bays of the Morris Beef Company, Chicago, won the honors, and received the popular acclaim, the Percheron team not competing, having been beaten by the Morris outfit last fall in Chicago. Competition appears to have consisted of Kenneth M. Charles' six Suffolks, which, although a great team of draft horses, were out-classed in respect of quality and style. The Chicago team was superbly handled by Frank Housely, of Lincolnshire, and consisting of horses belonging to the British breeds, two of them having been bred in Scotland, and two in Canada, it might well arouse a Briton's pride. By way of description, we quote the comments of the Scottish Farmer, whose reviewer found them a far fresher team than he expected to see:

"They make one of the finest displays of Clydesdale draft horses ever exhibited, and are justly entitled to the victory they achieved over the Armour grays at Chicago last November. In the wheel are the two British-bred Clydesdales, Malcolm and Drew. Drew is the near horse in the wheel. He was first at the Highland and second at the Royal in 1905, being then shown by Mr. Griffiths, Plumstead, who showed the great horse at Edinburgh last week. Drew was then known as King Harry. He was bred by Mr. Ismay, Waverton, and got by Lord Lothian. He is a magnificent horse still, with big feet, grand pasterns, and the best quality of bone you could wish to see. Malcolm was formerly known as Johnny, and is the off horse in the wheel. He was bred by Mr. Snowden, Wellfield, Durham, and was got by Prince of Millfield. He was owned and successfully exhibited in Scotland by Mr. Walter Ankenhead and Mr. J. Kilpatrick, and is simply a dandy still. He and Drew are a pair of splendid draft horses, and nothing like them could be matched by the Shires. The middle or body pair—Archie and Robbie—are Canadian-bred Clydesdales. Archie was bred near Toronto, and was got by one of Colonel Holloway's horses, Charming Prince, whose sire was Prince Charming, and his sire, again, was Cedric. Robbie was also bred in Ontario, and was got by the Macgregor horse, MacLaskie, which was exported a good many years ago. They are a pair of thick, stylish horses, with good feet and legs, and grand togs, but perhaps scarcely so high-class as the pair in the wheel. The leaders are, on the near side, Angus, and on the off side, Donald, the former bred in Illinois, and, it is understood, got by a Shire horse out of a Clydesdale mare. He is the least satisfactory of the six, lacking the spring at the ground, and quality of bone of the others. Donald was bred in Iowa, and was got by the well-known Sir Christopher. Clydesdale men should give the Nelson Morris Company a gold medal for sending over a team to advertise the breed as this team is doing."

It is reported in some quarters that the Morris Company are building up a new team, having already got one horse for this purpose. Elsewhere it is stated that this extra horse was a provision to guard against the breaking of the team by a mishap to one of its members.

The Hackney classes were not very strong numerically, but the quality was good. In mature stallions, Richard P. Evans won with Evanthis, a splendid mover. Second was W. Burnett Tabbs' Leopard. Three-year-old stallions were headed by Flash Cadet. In two-year-olds was keen competition between R. Whitworth's Antonious, a free-acting chestnut by Polonius, and Walter Briggs' Albin Wildfire, placing being finally made in order of mention. A cup for the best Hackney mare, offered by Martinez de Hoz, an Argentine breeder, went to A. W. Hickling's Adbolton St. Mary, champion of the London Spring Show.

Canadian winnings comprised a second prize by the London Hunt, Master Hon. Adam Beck, in a

class of five teams of three qualified Hunters from one Hunt, the winners being a magnificent trio of browns, Buffoon, Cambrian and Sombre, shown by Mr. Stokes. The horses of the Canadian team were Sir James, Sir Edward, and Sir Frederick. They were rated first on conformation and performance, but lost a few points to their competitors on appointments. Sir James also scored second in a fine class of heavy-weight qualified Hunters, and reserve in a class where conformation only was considered. Sir Edward, after winning one position, was debarred until the last night, by a temporary lameness, owing to an accident, but in the championship beat all the first and second prize winners. The three Canadian horses above named were bred in Western Ontario, Sir Edward in Kent Co., Sir Frederick in Middlesex, and Sir James in Elgin. The second of the three high jumps was won by Capt. Evans, of Montreal, with the bay gelding, Confidence, which cleared the bar at 7 feet. The first event was won by a French horse, at 7 feet 4 inches, and the third by Walter Winans, with a Canadian-bred horse, at 6 feet 9 inches.

Among the American exhibitors, Judge W. H. Moore was probably the most successful.

The summary of awards shows the international character of the contest:

Great Britain—52 firsts, 51 seconds, 51 thirds, 36 fourths, 30 fifths, 17 sixths, 43 reserves, and 52 commended.

America—34 firsts, 24 seconds, 29 thirds, 23 fourths, 15 fifths, 6 sixths, 16 reserves, and 17 commended.

Italy—2 firsts, 5 seconds, 2 thirds, 1 sixth, 1 reserve, and 1 commended.

Belgium—1 first, 2 seconds, 1 third, 1 fourth, 1 fifth, 2 reserves, and 1 commended.

Canada—1 first, 2 seconds, 2 fourths, and 2 reserves.

Argentina—1 first, 2 seconds, 1 third, 1 fifth, and 1 commended.

Norway—1 fifth, and 2 commended.

Holland—1 third and 1 fifth.

British exhibitors took eleven cups, United States eight, Canada one, and France one.

Tuberculosis in Hogs.

Reports gathered from the various meat-packing centers of the U. S. show tuberculosis of hogs to be on the increase, and causing heavier loss to raiser and packer alike than any other disease.

Statistics show that a year ago there were over 55,000,000 hogs in this country, and their value at that time was over \$339,000,000. Federal inspection at the abattoirs of the country show two per cent. of the hogs slaughtered to be affected with tuberculosis. Reports from Europe show a far more widespread infection, that runs as high as 5.5 to 7.5 per cent.

The small amount of money required to start in the hog-raising business, and the quick returns on the amount invested, make it an attractive field for operations. Hogs will make greater gains on less feed than almost any other live stock, and at the same time utilize profitably waste food products of every variety, if properly prepared. As tuberculosis of hogs is chiefly contracted through feeding, the significance of the latter feature is obvious.

Hogs from Arkansas, Oklahoma and Texas are remarkably free from tuberculosis, due to the methods of caring for them, or rather the lack of care. They are not restricted to feed-lots, where disease is commonly found, but roam over large areas to shift for themselves. No prolonged feeding is practiced in narrow limits, but from birth to maturity they are pastured on alfalfa, oats, corn, rape and peanuts. Hogs raised in the forest regions of Hungary are likewise rarely affected with tuberculosis. In striking contrast are the hogs slaughtered at three cities in one of the leading dairy States where there are a large number of co-operative creameries, and the raw skim milk is fed. Samples from two of these creameries were injected into guinea pigs, and in one instance virulent tubercle bacilli were recovered.

Buyers for packing-houses are learning from bitter experience to avoid sections of certain States, and two firms will not buy hogs from one State known to be badly infected. In fact, many of the smaller packers in the Central West buy subject to post-mortem inspection, as a measure of self-protection.

An investigation, carried on by the Bureau of Animal Industry in a certain section of the Middle West, consisted of tagging hogs hauled to market in wagons. Of 3,120 animals tagged, it was learned that all of the affected stock came from less than 6 per cent. of the farms.

It is known beyond all doubt that the majority of tuberculous hogs are produced by the following causes:

1. Feeding raw milk and slime from creameries.
2. Feeding hand-separated milk from tuberculous cows.
3. Feeding behind tuberculous cattle.

4. Feeding tuberculous carcasses.
5. Feeding slaughter-house offal.

The danger in feeding hogs behind tuberculous cattle lies in the fact that such cattle discharge enormous numbers of tuberculosis germs in their feces.

Sooner or later the packer will buy subject to post-mortem examination, as some are now doing with certain classes of female cattle. Then the hog-raiser who persists in fattening with tuberculous material will be made to feel the cost of his indifference or lack of knowledge. To-day the buyer makes his purchases with the knowledge that a proportion of his animals will be condemned, and the price fixed accordingly, with the result that the careful breeder suffers with the careless one. This is not equitable. But when the packer buys subject to post-mortem results, the painstaking and intelligent raiser will receive more than he does now, and the ignorant or indifferent breeder will get less, which is more nearly a fair deal for all concerned.—[U. S. Bureau of Animal Industry.]

The Annual Fire Sacrifice.

"Time was when the timber resources of the Dominion were rated in the terms of a billion acres. Dr. Bell put it at 1,650,000,000 acres of woodland. But subsequent exploration has shown that a great part of this vast extent of territory has been so thoroughly burnt over that it possesses little or no commercially valuable timber. Nowadays, even optimistic estimates place the figures at little over three hundred million acres. Even thus reduced, this constitutes a magnificent amount of timber, but there is no timberland in existence that can long withstand the ravages of forest fires," says Toronto Saturday Night, in the course of a pointed argument for a more adequate fire-rangin system to prevent and control the forest fires which annually usher in the summer season, with such tremendous destruction, consuming not merely the timber, but also, in many cases, the layer of mold in which the trees take root and grow, leaving immense areas of barren and forbidding rocky waste.

"Important as are quick and efficient means of getting to the fire, once it has started," remarks our contemporary, "measures of prevention are more important still. The criminal negligence which goes away and leaves a smouldering camp-fire, or starts to burn brush without due precautions, should be made a penal offence. Some years ago, in Pontiac County, Quebec, a settler, to clear a patch of land for the sowing of two bushels of potatoes, started a fire which destroyed 300,000,000 feet of pine timber, at a loss of over \$3,000,000 to the Province. And it is horrible to read that the recent fires in New Brunswick originated in one case in a fire which had been left as extinguished, and in another in a young farmer burning some waste in a field. Of course, there is always a possibility of accident in these matters, but there is also in most cases a certainty of criminal negligence, and the law should see that men who wantonly cause such damage are properly punished. This is one of the many things to be done, if Canada is to retain her magnificent timberlands. There is no use in the world in preventing aliens from exporting the wood, if it is to be food for forest fires through our neglect of the proper precautions. Much better that the Americans should have it than the flames."

Royal Counties Show.

The show of the Royal Counties Agricultural Society, held at Reading, commencing June 8th, is described as one of the best of the series, exhibits being numerous, and quality superior. The total entries considerably exceeded 2,000. The display of Shires was ahead of anything previously seen at this show, the entries averaging nine to a class, with merit high throughout. Mimm's Champion, a two-year-old, was awarded the male championship, Sir E. Sterns' Danesfield Stone-wall being reserve. Female sweepstakes was won by Sir Walpole Greenwell, with Mardon Peach. Among the Shorthorns, a capital class of typical dual-purpose cows were entered for the Short-horn Society's prize. This show must not be confused with the Royal, which was held at Gloucester, June 22nd to 26th.

The value of the Derby stakes to the King, according to the Racing Calendar, is £6,450.

A party of thirty-one agriculturists from Oldenburg, Germany, have been studying methods of farming and stock husbandry in Britain.

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MARKETS.

Toronto.
LIVE STOCK.

At West Toronto, on Monday, June 28th, receipts were 72 cars, consisting of 1,503 cattle, 90 hogs, 117 sheep, and 4 calves. Quality of cattle never better this season; trade brisk; prices firm; exporters not sold; drovers waiting for Tuesday. Best loads of butchers', \$5.75 to \$5.90; good butchers', \$5.30 to \$5.60; mediums, \$5 to \$5.25; common, \$4.50 to \$5; cows, \$3.75 to \$4.75; milk cows, \$30 to \$60; calves, \$3.20 per cwt.; sheep, \$3.50 to \$4.25 per cwt.; spring lambs, 8c. to 9c. per lb.

REVIEW OF LAST WEEK'S MARKET.

The total receipts of live stock at the City and Union Stock-yards last week were 319 cars, comprising 5,034 cattle, 3,131 hogs, 2,602 sheep and lambs, 624 calves, and 151 horses.

At both yards, especially at the City, there was a falling off in the numbers of stall-fed cattle, with a corresponding increase in the receipts of grassers. The market was strong for all cattle of good quality, especially for the stall-fed, as well as those fed meal while on grass, of which there were not a few. Trade was good all week for finished cattle, with prices quite as high as at any time this season.

Exporters.—Export steers sold at \$5.75 to \$6.00, the bulk going at \$6.20 to \$6.30, export heifers, \$5.40 to \$6; bulls, \$4.75 to \$5.50; cows, \$5 to \$5.30.

Butchers'.—Prime picked lots sold at \$5.75 to \$6; loads of good, \$5.60 to \$5.85; medium, \$5.25 to \$5.50; common, \$4.50 to \$5.15; cows, \$3.25 to \$5.25; canners, \$2.25 to \$2.75.

Stockers and Feeders.—Trade in feeders and stockers was light, farmers and dealers refusing to pay prices asked, and, in fact, bidding lower. Feeders, 800 to 900 lbs. each, were most in request, and sold at \$4.40 to \$4.75; stockers, 400 to 700 lbs., sold at \$3 to \$4 per cwt.

Milkers and Springers. Receipts were moderate. Good to choice cows sold at about steady prices. Common light cows, and backward springers, were slow

sale, at lower quotations. The good to choice cows sold at \$40 to \$55, with a few at \$58 to \$60, each. Common, at \$25 to \$35.

Veal Calves.—Receipts moderate, with prices a little firmer, at \$3 to \$6.50 per cwt.

Sheep and Lambs.—Receipts fairly large, with prices easier for sheep, but lambs were firm. Heavy, fat ewes, \$3.25 to \$3.75 per cwt.; light ewes of good quality, at \$4.25 to \$5 per cwt.; rams, \$3.25 to \$3.50; spring lambs, 8½c. to 9½c. and 10c. per lb.

Hogs.—Receipts of hogs were light, and prices firmer, the market at the end of the week closing strong, as follows: Selects, fed and watered at the market, \$8.10 to \$8.15.

Horses.—At the Union Horse Exchange last week the offerings of horses numbered over 150, amongst which were many of the best-quality horses that money could purchase. The demand for this class was not as brisk as usual, the customers visiting the market last week, as a rule, preferring a lower-priced class. Manager Smith stated that it was his intention to have on hand at all times, horses of as good quality as could be bought. Dealers may not only go on the regular sales days, but at any time, and be perfectly sure of getting horses that will suit. Drafters, as a rule, sold from \$170 to \$200, but a few horses of the best quality brought \$220; general-purpose horses, \$140 to \$180; expressers and wagon horses, \$150 to \$210; drivers, \$100 to \$160; serviceably sound, sold at \$30 to \$90. Two loads of the above horses were bought for the Northwest, and the balance went to local Ontario points.

BREADSTUFFS.

The wheat market is reported by the dealers to have been dull lately, but there was no change quoted in prices. Wheat—No. 2 red, white or mixed winter wheat, \$1.38 to \$1.40. Manitoba—No. 1 northern, \$1.33½; No. 2 northern, \$1.31½; No. 3 northern, \$1.29. Rye—No. 2, 80c., nominal. Peas—No. 2, 95c., nominal. Oats—No. 2 white, 61c.; No. 3, 60c., track, Toronto. Barley—No. 3 extra, 62c. to 63c.; No. 3, 61c., nominal. Corn—No. 2 yellow, 81½c.; No. 3 yellow, 81c., track, Toronto. Flour—Ontario ninety per cent., winter wheat patents, \$5.50, in buyers' sacks, on track, Toronto; Manitoba, first patents, \$6.20 to \$6.40; second patents, \$5.70 to \$6; strong bakers', \$5.50.

HAY AND MILLFEED.

Hay.—Baled, in car lots, on track, Toronto, \$12.50 to \$13.50. Straw—Baled, car lots, track, Toronto, \$7 to \$7.75. Bran—\$24 to \$24.50, in bags. Shorts, \$1 more.

HIDES AND WOOL.

E. T. Carter & Co., 85 Front street, East, Toronto, have been paying as follows: No. 1 inspected steers, 60 lbs. up, 12½c.; No. 2 inspected steers, 60 lbs. up, 11½c.; No. 1 inspected cows, 12c.; No. 2 inspected cows, 11c.; No. 3 inspected cows and bulls, 10c.; country hides, cured, 10½c. to 11½c.; calf skins, 14c. to 16c.; horse hides, No. 1, \$2.75; horse hair, per lb., 5½c. to 6½c.; sheep skins, each, \$1.30 to \$1.50; wool, unwashed, per lb., 18c. to 20c.; wool rejects, per lb., 14c.

COUNTRY PRODUCE.

Butter.—Receipts large; prices firm. Creamery pound rolls, 23c. to 24c.; creamery solids, 22c.; separator dairy, 19c. to 21c.; store lots, 18c. to 19c.

Eggs.—Receipts moderate; prices firmer, at 20c. to 21c.

Cheese.—Receipts of new, large, 12½c. to 13c. Old is becoming scarce, and is quoted at 14c. to 14½c.

Beans.—Dealers report supplies as being light, and prices are higher. Primes, \$2.20 to \$2.30; hand picked, \$2.35 to \$2.45.

Potatoes.—Car lots of old potatoes, on track, Toronto, are quoted at 75c. to 85c. per bag.

Poultry.—Receipts light; prices easier. Turkeys, 17c. to 20c. per lb.; spring ducks, 30c. to 35c. per lb.; spring chickens, 30c. to 35c. per lb.; fowl, 19c. to 12c. per lb.

TORONTO FRUIT MARKET.

The wholesale fruit market was opened last week, when an average of about three carloads of strawberries per day were received, with a few sweet cherries. Strawberries sold from 8c. to 12c. per quart; cherries, per basket, 75c. to \$1.

Montreal.

Live Stock.—Shipments of cattle from the port of Montreal during the week ending June 19th, amounted to 2,680 head, against 2,277 head the previous week.

The local cattle market held firm, supplies not any too large, and demand moderately active. The supply of grass-fed cattle was fairly large, but the quality was poor, and the general view was that these should have been held on the farms till in better condition, when better prices might have been realized. Best grassers sold at 5½c., medium at 4½c. to 5c., and common at 3c. to 4c. Stall-fed cattle brought 6½c. to 6½c. for choice, 6c. for fine, 5½c. to 5½c. for good, 4½c. to 5c. for medium, and 3c. to 4c. for common. Sheep continued to bring 3½c. to 4½c., according to quality, spring lambs bringing \$3 to \$7 each, and calves \$2 to \$4 for common, and \$5 to \$10 for choice. The market for hogs was firm, and prices were 8½c. to 8½c. for selects, weighed off cars.

Horses.—Market dull in Montreal last week. Supplies continued light, and prices showed little or no change. Heavy draft, 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$185 to \$240 each; small animals, 1,000 to 1,100 lbs., \$100 to \$150 each; inferior, broken-down animals, \$75 to \$100 each, and choice saddle or carriage horses, \$300 to \$500 each.

Dressed Hogs.—Demand for dressed hogs was very good, considering the hot weather. It is probable, however, that they were wanted by packers, and not for immediate consumption, so that the weather would have little influence on them; 12c. per lb. for selects.

Potatoes.—It begins to look as though the supply of potatoes would shortly become scarce. Green Mountains were purchased at about \$1.10 per 90 lbs. carloads, on track, and P. E. I. stock was obtainable at about 94c.

Eggs.—Hot weather has been having its effect on the quality of the eggs, and, consequently, on prices. Up until recently, however, although buyers had been doing their best to obtain stock at 16½c. to 17c., at country points, it looked as though they had been able to get very little of it at better than one cent more than these figures. Straight-gathered stock sold at 19c., No. 1 candled selling at 19c. to 19½c., and selects at 22c. per dozen.

Butter.—Continued at an exceptionally high figure, and it is said that there is little or no demand for export. Townships creamery sold here last week at about 23½c. to 23½c. per lb. Fresh dairy, in tubs, sold at from 18c. to 19c. per lb. On Monday, 28th, creamery broke to 21½c. to 22½c. in Townships, selling here at 23c. to 23½c.

Cheese.—A moderate demand for export is reported. Ontarios sold here at 13c. to 13½c., while Quebecs were quoted at 12½c. to 12½c., and Townships at 13c.

On Monday, June 28th, prices were lower in sympathy with a drop in country prices, Quebecs being available here at 11½c., Townships 11½c. to 11½c., and Ontarios at 11½c. to 11½c.

Grain.—Market for oats is exceedingly interesting and uncertain, fluctuations being violent. No. 2 Canadian Western oats may be quoted at 60c. to 60½c. per bushel, No. 1 extra feed being 59½c. to 60½c., No. 1 feed being 59½c. to 60c., No. 3 Canadian Western 58½c. to 59c., No. 2 Canadian barley sold at 72½c. to 74c., and Manitoba feed barley at 67½c. to 68c., buckwheat being 69½c. to 70c.

Feed.—Ontario bran and shorts unobtainable, Manitoba bran selling at \$22 to \$23 per ton, in bags, and shorts at \$24 to \$25, pure grain moultrie being \$33 to \$35, and mixed being \$28 to \$30.

Flour.—\$6.30 per barrel, for Manitoba first patents, \$5.80 for seconds, and \$5.60 for strong bakers, the range being to 10c. or 20c. higher. Ontarios are \$6.75 for patents, and \$6.50 to \$6.60 for straight rollers.

Hay.—There is a moderately active demand, and prices are very firm. Quotations are \$14 to \$14.50 per ton, carloads, track, Montreal, for No. 1 baled, \$1 less for extra No. 2, \$11.50 to \$12 for No. 2, \$1.50 less for clover mixed, and yet a dollar less for clover.

Hides.—Demand fair throughout, the warm weather having little effect upon prices. Dealers were paying 11c. per lb.

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for No. 3 hides, 12c. for No. 2, and 13c. for No. 1, and 14c. for No. 2 calf skins and 16c. for No. 1, selling to tanners at ½c. advance. Lamb skins 20c. each, and sheep skins \$1 each. Rough tallow, 1½c. to 3c. per lb., and rendered, 5½c. to 6c. per lb.

**Representative Cheese
Board Prices.**

Alexandria, Ont., 11 5-16c. Kingston, Ont., 11 5-16c., 11½c. and 11 11-16c. Belleville, Ont., 11½c. to 11 7-16c. Winchester, Ont., 11 7-16c. Brockville, Ont., 11½c. Vankleek Hill, Ont., 11 5-16c. to 11½c. Perth, Ont., 11½c. Napanee, Ont., 11 5-16c., 11 7-16c. and 11½c. Picton, Ont., 11½c. Iroquois, Ont., 11 5-16c. Cornwall, Ont., white, 11½c.; colored, 11 7-16c. Brantford, Ont., 11 7-16c., 11½c., and twins, 11 9-16c. Ottawa, Ont., 11½c. to 11½c. Kemptville, Ont., 11½c. St. Hyacinthe, Que., butter, 22c.; cheese, 11 1-16c. Cowansville, Que., butter, 22½c.; cheese, 11½c. Chicago, butter, creameries, 22c. to 25c.; dairies, 20c. to 23½c.; cheese, easy; dairies, 14c. to 14½c.; twins, 13½c. to 13½c.; Young Americans, 14c. to 14½c.; long-horns, 14c. to 14½c.

Chicago.

Cattle—\$5.10 to \$7.85; Texas steers, \$4.75 to \$6.25; Western steers, \$4.75 to \$6.25; stockers and feeders, \$3.60 to \$5.50; cows and heifers, \$2.50 to \$6.50; calves, \$5.50 to \$7.50.

Hogs—Light, \$7.05 to \$7.70; mixed, \$7.25 to \$7.35; heavy, \$7.30 to \$7.90; roughs, \$7.30 to \$7.50; good to choice heavy, \$7.50 to \$7.90; pigs, \$6.10 to \$6.90; bulk of sales, \$7.45 to \$7.75.

Sheep and Lambs.—Native, \$3.50 to \$5.85; Western, \$3.75 to \$5.75; yearlings, \$6 to \$7; lambs, native, \$5 to \$8; Western, \$5.50 to \$8; spring lambs, \$5.50 to \$8.85.

Buffalo.

Cattle—Prime steers, \$6.85 to \$7.15. Hogs—Heavy and mixed, \$8 to \$8.10; Yorkers, \$7.15 to \$7.90; pigs, \$7; roughs, \$6.75 to \$7; dairies, \$7.35 to \$7.90.

Sheep and Lambs.—Lambs, \$4.50 to \$8.75; yearlings, \$6.50 to \$6.75; wethers, \$5.25 to \$5.50.

British Cattle Markets.

London cables for cattle 13½c. to 14½c. per lb. for Canadian steers, dressed weight; refrigerator beef, 10½c. to 10½c. per lb.

An insurance man declares that he tried this scheme the other day, and that it worked. He found himself caught in a rainstorm, and, being in too much of a hurry to wait for it to stop, he was obliged to acquire an umbrella right away, quick. He paused under an awning and waited, he says, until somebody came along who sized up as a man with a guilty conscience. Then the insurance man stepped up to the stranger, saying abruptly:

"I'll trouble you for my umbrella!"

The stranger stared at him a moment, handed over the umbrella, and walked away, muttering a word of apology. Of course, the insurance man admits, the scheme might not always work, and a certain amount of discrimination should be used in the selection of the victim.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

Miscellaneous.

A MORTGAGE ENCUMBRANCE.

'An a person, by giving six months' notice to a person who has a mortgage on a farm that he has just purchased...

Ans.—Probably not, if the mortgage term has not expired, and there is no privilege expressly given by the instrument itself for payment off before maturity.

POISON IVY.

Is there anything that I could get, or what is best thing to do to kill poison ivy, which is running in the grass?

Ans.—Digging it up and burning it is the only remedy. Gloves should be worn while at this work, and it would be well also to defer the job until later in the season when there would be less danger of getting poisoned.

VARIETY OF FALL WHEAT - FORMALIN FOR SMUT.

1. What variety or name of wheat do you recommend best for heavy clay soil? 2. Would it be advisable to sow it about the middle of August on summer-fallow?

Ans.—1. No other variety is so popular, or such a good yielder, as Dawson's Golden Chaff. Imperial Amber comes second, but it is weaker in the straw and bearded.

2. The latter end of August would be better, especially on summer-fallow. 3. If too strong a solution of formalin is used, the seed is injured.

TO PREVENT SUCKING.

Can you give me any information, through your valuable paper, how I can stop a calf, a yearling, from sucking its mother?

Ans.—Probably the best plan would be to separate the yearling from the cow, with one or two other young cattle to keep it company.

DAIRYMAN. Ans.—Probably the best plan would be to separate the yearling from the cow, with one or two other young cattle to keep it company.

know Take a piece of light, tough wood that will not split (basswood, for instance), about six inches long, five inches in width, and an inch thick, or less.

SPITTLE INSECT.

In our pasture field there are places, some covering an acre or more, where the grass is covered with stuff that looks like froth, or spittle, and is on almost every stalk, or between the stalk and the first leaf, about the size of a pea or larger, and in the center is a small white maggot, slightly dark at one end, and flying around it are hundreds of small white millers.

A SUBSCRIBER.

Ans.—The species of insect referred to is well named the Spittle insect. It calls forth inquiries every year, but seldom from one who has observed it so discriminatingly as the present inquirer, for it is usually supposed to be the product of snakes, or toads, or the excretion of the plant itself.

Veterinary.

PARTIAL DISLOCATION OF PATELLA.

Yearling colt was all right this spring when turned out on pasture. It is now lame, and a soft lump has appeared just below the stifle joint.

Ans.—The patella (stifle bone) becomes partially dislocated, and the soft lump is a porcellaneous deposit resulting from the trouble. It is not probable the animal will ever be all right again, but, if properly treated, should make a useful animal.

DAIRYMAN.

Sportsman to Gillie—"You might go over to Miss Smith's, give her my compliments, and say I will be unable to come to her party to-night.

Donald—"Mr. Brown will not be able to come to your party to-night, as he's fou' o' complaints, but though he's lost his sight his memory's clear."

GOSSIP.

He—"These glasses give me a very intellectual appearance, don't you think?" She—"Yes. Aren't they powerful?"

After a recent local-option fight in an Ohio town, the wife of one of the "dry" workers remarked to her husband one morning that their cow would soon be dry.

"Not a horse on hand," is the report of John A. Boag & Son, Queensville, Ont. However, Mr. Boag intends to sail for the Old Country on July 9th for a shipment of Clydesdale stallions and mares, which he expects to arrive home about August 20th, after which date he will be pleased to supply anyone wanting a first-class stallion or mare.

H. Smith, Exeter, Ont., writes: "The show cattle I am advertising in this issue of 'The Farmer's Advocate' are as promising a lot as was ever on the farm at this time of the year, all possessing breed character, scale and quality to an unusual degree, and they are in nice fix to go on with and be in proper bloom by fair time."

SUPPLEMENTARY LIST OF FAIR DATES.

Table listing fair dates for various locations: Astorville (Sept. 28), Brussels (Sept. 30 and Oct. 1), Beamsville (Sept. 29 and 30), Colborne (Oct. 5 and 6), Dunchurch (Oct. 5), Eino (Sept. 16 and 17), Guelph (Sept. 14 to 16), Houghton (Oct. 6), Lion's Head (Sept. 29 and 30), Millbrook (Sept. 30 and Oct. 1), Picton (Sept. 22 and 23), Paisley (Sept. 28 and 29), Rainham (Sept. 22 and 23), Stratford (Sept. 28 and 29), Springfield (Sept. 23 and 24), Wingham (Sept. 28 and 29), Welland (Oct. 5 and 6).

H. J. Davis, of Woodstock, Ont., recently sold to R. H. Reid & Sons, Pine River, Ont., the imported roan yearling bull, Best Boy, bred by Geo. Walker, Tilleygreig, Udney, Aberdeenshire, Scotland; sired by Duke of Gordon (88456); dam Bessie 48th, of the famous Marr Bessie family.

THE SPICE OF LIFE.

The inhabitants of a certain rural parish had been paying over-much attention to sampling the local whiskey, and the minister took advantage of his position in the pulpit to administer reproof.

"An' I tell ye, one an' all, ye're on the way to Perdection!" he cried. At that moment a fly settled on the Bible before him. He raised his fist.

"Ye're gaein' tae H—," he shouted; "and ye'll a' get there just as sure as—sae sure as I ding the life out o' this flee!" His fist crashed down as he uttered the words, then he looked to see the results of his handiwork.

"Missed!" he ejaculated; "ah, weel, maybe there's a chance for some o' ye yet!"

"You know," said the man, "how innocently your wife will look at you across the breakfast table when you have searched your pockets and discovered a sovereign missing."

"You may have your suspicions, but you must keep them to yourself. I stood it for two or three years before a bright thought came along. Then I got hold of a counterfeit sovereign, a hopelessly bad one, placed it in my purse, and when I got up one morning and missed it, I felt happy."

"Two hours after breakfast my wife went out, and at noon I was sent for to identify her at the police station. She had handed that bad sovereign out in payment for an umbrella and been caught, and she had been a prisoner for two hours when I got there."

"And what did you say?" he was asked.

"Not a word." "And what did she say?" "She laid it on the milkman, of course."

GRAVE AND GAY.

He knows not the value of flowers who knows not botany.

Men are to be judged by where they are going rather than by whence they came. Some people get on in the world; most just get on in years.

Afterthoughts are usually best—woman was an afterthought.

The fewer friends you have the more popular you are with yourself.

When a woman loses anything she always thinks someone stole it.

Some people never work so hard as when they are doing useless things without pay.

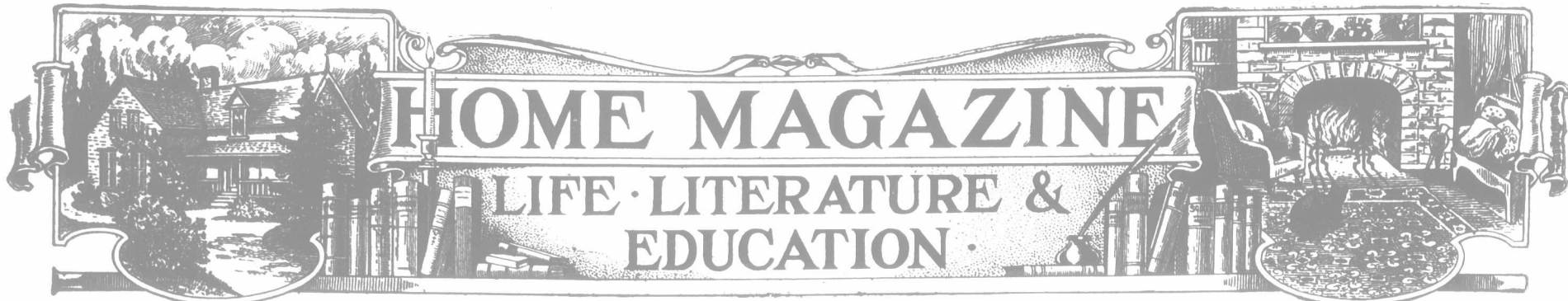
All the world's a stage; it's only the failures amongst the actors who find time to be critics.

Many a man's popularity is due to the fact that he doesn't think aloud.

The easiest way to do anything may not be the best, but it is the most popular.

WHEN THE GRASS IS GREEN.

Gather a single blade of grass, and examine for a minute quietly its narrow, sword-shaped strip of fluted green. Nothing, as it seems, there of notable goodness or beauty. A very little strength, and a very little tallness, and a few delicate, long lines meeting in a point—not a perfect point, either, but blunt and unfinished—by no means a creditable or apparently much-cared-for example of nature's workmanship; made only to be trodden on to-day, and to-morrow to be cast into the oven; and a little pale and hollow stalk, feeble and flaccid, leading down to the dull, brown fibers of roots.



The season for hiring teachers is well under way. We once heard of a teacher who, in her application, stated that she would "teach for five dollars less than any other teacher who applied"—an ignominious application, but more ignominious still the action of the trustees who accepted it. The quality of the teacher engaged in a section is no unimportant consideration. Upon it, to some extent, undoubtedly depends, often overwhelmingly, the future success or failure of the children thrown so unreservedly upon an influence stronger than any save that of the parents, at an especially formative period of life. The best teacher procurable is, then, none too good for the children, and the best teacher is not likely to hold his or her services too cheaply.

The question for each board of trustees which desires to do its duty faithfully to the section, should not be, "How little can we secure a teacher for?" but, "How can we secure the best teacher for the best salary the section can afford to pay?" The pocketbook should never be saved at the expense of the child.

The habit of adding "state salary wanted" to advertisements for teachers is only to be reprehended. To state the salary a section is willing to pay for a good teacher, is by far the better way—more satisfactory to both trustees and teacher. This method is steadily growing in favor, and it is to be hoped that, ere long, it will be universally adopted.

* * * *

At the conclusion of the inquest into a recent murder in Winnipeg, the coroner of that city was courageous enough to call attention to a growing evil in our modern courts of justice. He referred to the increasing and objectionable practice of browbeating and bullying witnesses. All lawyers are not guilty, but a great many cannot resist the temptation to build up reputations as clever cross-examiners at the expense of the man in the witness box.

Take, for instance, a man who has witnessed some incident in connection with a crime, or has some knowledge as to its details. Beyond seeing or hearing, he has no connection with the affair whatever. But in the interests of justice, as a good citizen, he desires the perpetrator to be captured and deterred in some way from repeating his crime. The eye-witness makes no attempt to conceal his knowledge, and, called to give evidence, goes willingly into the box. That is the way it ought to be. But what really happens? An honest citizen, innocent of any wrong doing, desirous of seeing justice done, goes into the witness box prepared to tell a straight story to the best of his ability. But he receives a rude shock. If he committed the crime himself, he could not be treated more unfairly. He is questioned and cross-questioned, and every effort is made to catch him in the mazes of repetition and insinuation. His word is called in question repeatedly; his private life is dragged into publicity, though these details have absolutely no bearing on the question at issue. Before the examination is over, the most veracious of men is so dazed and confused that the court has doubts of his truthfulness, and he himself begins to wonder if he does belong to the ranks of the perjurers. His reputation and his self-

respect are both besmirched, and he fares as badly, almost, as if he were the culprit himself. To such an extent has this practice become general that the coroner believes that men will do their best to conceal the fact that they know anything about a case, with the result that important knowledge is withheld from the prosecution, and the criminal is never punished. It might be remarked that Winnipeg is not the only Canadian city in which this condition exists.—[Winnipeg "Farmer's Advocate."

People, Books and Doings.

Lord Charles Beresford will open the Toronto Exhibition this year.

Miss Nellie Edwards, owner and manager of the Coaley Poultry Farm, Gloucestershire, Eng., was one of the interesting visitors at the "Quinquennial," Toronto, last week.

D. Lorne McGibbon will build a sanitarium for consumptives at St. Agathe, in the heart of the Laurentian Mountains. The building will cost \$100,000.

W. T. Stead has announced that he intends to open a bureau for communication with the other world. The correspondent "on the other side," he declares, is Miss Julia Ames, formerly on the editorial staff of *The Union Signal*, of Chicago. From her, he asserts, he has had several messages.

The biography of Algernon Charles Swinburne is to be undertaken by his life-long friend, Theodore Watts-Dunton.

A Bicentenary celebration of the birth of Dr. Samuel Johnson will be held at Lichfield, Eng., in September next.

Four hundred Peers own over 5,000,000 acres of land in England. More than three-fourths of the entire land of England and Wales is owned by 1-785th part of the population. Of the 32,000,000 of people in England and Wales, 31,000,000 are without any right whatever to the land of the country.

A Champlain tercentenary celebration will be held upon the shores and waters of Lake Champlain, beginning July 4th, and ending July 10th.

Miss Mamie Dreams, a sixteen-year-old girl, has a perfectly formed man's throat, which promises great things in voice-production, and is the wonder of the Laryngological Society. She is being put through a careful course of training in London and Paris, and, it is expected, will be turned out an accomplished baritone of high order.

A Great Opportunity.

I am venturing to ask our readers of the Home Magazine to accept, in the place of my own contribution, some jottings, naturally very much condensed, from the notebook of Mrs. Parsons, of Forest, a member of the Canadian Council of Women, who has been present at all the meetings which have so far been held by the International gathering in Toronto. The ears of my kind young substitute being keener by far than my own, and her eyesight more trustworthy, I am thankful to avail myself of her willingness to lend them to us for our column to-day. I refer

on, as a kind of aftermath, I shall consider it my privilege to give you, under my own hand, some more of the incidents, and to quote some more of the many wise and helpful words which may continue to fall from the lips of our guests from other lands who have joined with the women of Canada in this sisterhood of service, in which "all races, all creeds, all classes" are embodied, and which has taken for its guiding motto the golden rule, "Do unto others as ye would they should do unto you."

NOTES BY MRS. PARSONS.

On Wednesday, June 17th, the first meeting of the great Congress of Women, whose coming has been so long looked forward to, took place in the Convocation Hall of Toronto University. This hall was most artistically decorated with groups of the flags of the different nations taking part in this International Council; while, over the platform, *The Golden Rule*, the motto of the Council, was printed in golden letters. Flowers and palms, too, had a part in the beauty and harmony of the arrangements, and here, under the gracious leadership of Her Excellency the Countess of Aberdeen, the note of welcome was sounded.

Lady Edgar, president of the Canadian National Council, gave the first word of greeting, saying the very word "Toronto" meant "meeting-place"; so this city, in name, as well as in fact, was well chosen for its present purpose. And this new land, palpitating with life strong and lusty, was fully alive to the honor done her by the older nations, and that the quickening interest aroused by the coming of the Congress would be for its lasting good. She bade them all welcome, in English, in German, and then in French.

The Mayor, Prof. Ramsay Wright, the Lieut. Governor, all spoke along the same line, to which Lady Aberdeen replied, amid much applause. She drew attention to the fact that this is the coming of age of the L. C. W., and that, while many new friendships will be made, many old and dear ones will be cemented, and that to-day no one and no body can afford to hold aloof from such great forces which make for peace, health, and the uplift of the moral standard everywhere.

She was followed by speakers from Germany, United States, Sweden, Austria, Netherlands, Italy, Great Britain, Norway, Belgium, Denmark, Australia and Hungary.

At the first meeting, on Friday, an interesting feature was the presentation to Lady Aberdeen, in trust for the Council, of an ebony hammer or gavel, with deep silver band, by Madame Baelde, from the Netherlands. "She said she felt it might look like presumption for them to give this, but no country, geographically, was just as like the Council work. They had the little windmills to control the smaller overflows of water, their local evils, the canals that controlled the waters that would drown out their nation, their national evils, these waters being safely carried to the great sea, and there controlled. She drew in a clear, clever way smiles to the Local, National and International Councils, and her pretty foreign accent lent a charm to her well-chosen words.

The subject discussed at one meeting was "The Health of the Na-

tions," where we learned that in every country vast strides had been taken; that food supply is under continual inspection and supervision; sanitary housing conditions; the health of the mother, as well as the child, is taken into consideration; and such questions as good water and purer air, were ably dealt with.

As Mrs. Edwin Gray, Great Britain, put it, it was one thing to imagine high ideals, but another to carry them out. We must never let our enthusiasm die, but just get rid of our fads, and work with warm heart but cool brain.

Dr. Elliott Brown spoke a few words on what is being done in Toronto, and told of a remarkable cure, in one week, of a child suffering from tubercular affection, through the new vaccine treatment. He stated many if not most diseases could be prevented; that last year, one case in every eight treated at the cottage hospital, was due to alcoholism, and that, though we looked upon the abolition of slavery as one of the greatest historical facts, he believed it would take a second place when the abolition of the bar was brought about.

An intensely interesting meeting was held at the Margaret Eaton School, when Miss Dendy, of Manchester, England, spoke on "The Care of the Feeble-minded." She founded the Lancashire and Cheshire Society for the permanent care of the feeble-minded; she now has under her care five homes, an industrial school, and 100 acres of land under cultivation for the use of the homes. The problem in England is too immense to deal with. They can only hope to keep the evil from growing. One case mentioned was that of a poor woman, next door to an imbecile, having a family of 21 children, all lacking the intellect necessary to make a livelihood. Miss Dendy stated that, the lower the intelligence, the greater were the animal passions developed, with the result that, in the case of marriage of such persons, they had extraordinarily large families. Legislation must take the matter up, and make it unlawful for such to marry, and the only way to deal with the question was to take the children and keep them always, and give them as happy and contented existence as possible. They were always children, for that matter, and must be kept in constant employment, in accordance with their strength, and always under supervision.

She further stated that feeble-mindedness did not seem to be the result of intemperance or tuberculosis, but it was always inherited in some way or another. Among Jews it was very rare.

Another good address was given by Dr. Elliott in connection with the tuberculosis exhibit. Some of the points he brought out particularly were: A careful patient is not a danger in the home; 90 per cent. of children are infected with the germ at an early age, but it only develops in later life under conditions favorable to the disease. Avoid patent cures of every kind; they are absolutely useless; put the money into good food; live out of doors; rest and sunlight and fresh air are the only cure.

If cases are taken in early stages, this is a curable disease. There is no danger in the breath of a consumptive patient, only in the sputum.

which must be buried or destroyed. These few notes will give some small idea of the introductive work of the I. C. W., but no report could adequately give a right significance of what this Congress stands for among the nations.

H. A. B. would like to add that her introduction of Mrs. Parsons as a substitute for herself, as a correspondent of "The Farmer's Advocate," obtained for her a good hearing position at each of the preliminary meetings, and a kindly recognition by the staff of the Press Committee, from whom, also, a warm welcome is assured for our own editor of the Home Magazine, when she attends, as we hope she will be able to do, the Quinquennial Congress this week. H. A. B.

Hope's Quiet Hour.

The Beauty that God Loves.

So shall the King have pleasure in thy beauty: for He is thy Lord God, and worship thou Him.—Ps. xlv., 12 (P. B. version).

"Make me Thy temple; silently upbuild Within my heart Thy holy dwelling-place.

And let its deep recesses all be filled With the rich overflows of Thy grace, My being's chords and discords all are stilled, Waiting the revelation of Thy Face."

The love of beauty is a part of our nature, and the attempt to crush it is an attempt to crush part of our divinely-inherited life. Our heavenly Father loves beauty, and no one need be ashamed of that natural longing after the beautiful. How do I know that God loves beauty? Why, because He has made beauty everywhere. We see it in the ever-varying sky and sea, in mountain and valley, in lake and stream. We see it in each tiny flower or delicate weed, in birds and animals, and, most of all, in that which is always the favorite study of painters and sculptors—the human body.

But God can never have pleasure in a beauty that is only skin-deep. If you desire to please the King with your beauty, it will not help you much to study advertisements of beauty-doctors, nor to try the effect on the complexion of various lotions and cosmetics. The beauty of a face is not a thing to be despised, by any means. It is a gift from God, a talent which has great power for good or for evil. If God has made you outwardly beautiful, do not despise His gift, nor disown it, but thank Him for it in all modesty, and use it to influence others for good. If you are not beautiful outwardly, but only moderately comely, it is surely right to make the best of your appearance; for to be slovenly in dress is to lessen your influence, and influence can always be used for good. I once heard of a lady who said that after she began to teach a Bible-class of young men, her clothes cost twice as much as they had done before. That is rather an extreme way of looking at the question, I think, but certainly it was wise to dress becomingly.

But, after all, the beauty that is very dear to the heart of God, is not the treasured possession of a favored few only. It is within the reach of each of His children. The King's daughter must be all-glorious "within," or she can never give lasting pleasure to anyone.

One Saturday evening last year I was talking to one of our clubs of young girls, and I got started on the subject of "love." They at once began to giggle, as though that subject were a great joke, but I was in solemn earnest, as they soon discovered. If there is anything very unlovely in my eyes, it is to see young girls loud and noisy and familiar when they are with young men. And what can be more beautiful than a young girl, who is quiet and modest and gentle, not playing with the mysterious passion of love, but keeping her heart as a temple of purity, where God can dwell. I believe, judging from my experience among the young people in Settlement work, that when young people are rude and noisy,

indulging in that debasing amusement which is usually called "flirting," most of the blame rightfully belongs to the girls. If they are quiet and reserved, the boys will seldom venture on any undue familiarities. If they grow affected in the presence of the opposite sex, and giggle and talk loudly, of course the young men will follow suit. Sometimes, on a train or an excursion boat, a party of young people will make itself very unpleasantly conspicuous—and it is usually the fault of the girls. This may sound severe, but men very seldom dare to take liberties with women if they know that the women will shrink away in disgust.

A great responsibility rests on the women of the world, for there is a good deal of truth in the assertion that "men are what the women make them." When a woman recklessly sacrifices her inner beauty of soul—the modesty and purity of thought and word that is her natural birthright—she helps to drag down the men who are thrown in contact with her.

A young man's idea of womanhood should be a high one; look to it, girls, that no young man finds it lowered by conversation with you. If he sees in you the beauty that God loves, if he dare not in your presence use a coarse or irreverent expression, he will be inspired to try to be worthy of your friendship, and your hand will help him up instead of dragging him down.

It is by thoughts that you will most certainly influence others for good or for evil. It is useless to talk in a lofty strain, if your thoughts are vain or lowering; for thoughts always make themselves felt. Treasure your white beauty of soul, keep the innocence of childhood unstained, and let it blossom out in the richer beauty of glorious purity. Let the light of God's Beauty pour down always on your upturned face, until His glory is seen shining in the radiant brightness of your eyes, in reflected brightness of holiness.

Remember that your stainless beauty of soul is very dear to the King; surely you will not let Him be disappointed. If His eyes—eyes that look right down into your heart—see no beauty that He can find pleasure in, do not shrink away from His searching gaze. Press nearer to His scorching light, ask in tremendous earnestness for pardon and strength, give no welcome to any thoughts which are ashamed in His presence. Beauty that has been lost may be regained. If you have recklessly sacrificed your dearest treasure—the white purity of your soul—

do not give up hope. When the prodigal was pressed to His Father's heart, the forgiveness was not partial, but absolute. He was restored to the position of a loved son, he was dressed in the best robe, and given a ring in token of a return to favor. If penitence is real and deep, the new beauty which God bestows on a forgiven soul has a glory which is all its own.

But let no one think that he can sacrifice innocence without lifelong regret. There is a radiant gladness belonging to one who has stepped out of a beautiful childhood into a stainless manhood or womanhood, which one who has thrown away his birthright vainly longs to regain.

Beauty of soul is the birthright of both men and women, a gift of great price to the world. Some men feel very injured and indignant if the women they love allow the pearl of their radiant purity to be dimmed by a shadow of evil, and yet they dare to offer those women a hand and heart which are far from clean. Is it the fault of the women that men can satisfy them so easily with a very low standard of holiness? Men shrink from associating on equal terms with a woman who is not lovely in her life—and women rise to the standard demanded of them, or, at least, make an earnest attempt to do so. If women looked for high ideals and spotless lives in men, and if they refused friendship to any men whose evil influence would be sure to sully the whiteness of their souls, the men would be helped to stand firm in the strength and beauty of untarnished, splendid manhood. The friendship which is begun on earth should be holy enough to live on in Heaven, and real friends will always help each other to climb. Beautiful souls inspire the world. It is well for us if we can say with King Arthur's knights:

"One there was among us, ever moved
Among us in white armour, Galahad."

DORA FARNCOMB.

About Hope's Book.

We are indebted to Rev. Dyson Hague for the following appreciation of "The Vision of His Face," by Dora Farncombe, and published by the William Weld Company, Limited. "I have read with a great deal of pleasure 'The Vision of His Face,' by Miss Farncombe, a lady who is well-known in London for her

devotional writing. The book certainly deserves a very wide circulation. It is deeply spiritual, and for the devotional reader, is strong and helpful throughout. It takes the Bible as it stands, and just gives you inspiring thoughts from the beginning to end. Some of the quotations are very fine indeed, and indicate a breath of reading. The number of Canadian authors is increasing, and we congratulate Miss Farncomb upon her efforts."—London "Echo."

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on.]

Canning Vegetables.

Dear Chatterers,—I came on a little bulletin to-day which proved a very mine of information to me, so, of course, I must pass it on to you—at least, a condensation of it, for it is quite long. It is on "Canning Vegetables," a subject upon which, I fancy, the most of us have had vague ideas enough. This bulletin, however, written by Mr. J. F. Breazeale, of the Bureau of Chemistry, U. S. Department of Agriculture, makes everything so clear, that I, for one, feel now as though I could go right at canning corn and peas and beans, with reasonable hopes of success.

After reading what he says, I believe the rest of you will feel so, too. You see the way has been well-prepared already by those papers on bacteria, for a thorough understanding of bacteria and the proper ways of fighting them is surely one of the very first essentials in successful canning.

The great secret of this art, as you know, lies in complete sterilization or killing of all germs of yeasts, molds and bacteria which may set up ferments or putrefactive work. Anything that is to "keep" must have all such germs killed by boiling (cold-storage is not, of course, considered in this connection), and not only must the fruit or vegetables be



The Mowers: French Peasants. From a painting by Julien Dupre, 1812.

boiled, but also the jars, rims, tops, etc., for so great is the rapidity with which bacteria reproduce, that a single bacterium left anywhere in contact with the substance canned, may, under favorable conditions, give rise to a family of 20,000,000 within the space of 24 hours. Finally, when sterilization has been complete, sealing must be done at once to prevent the entrance of the germs of molds, yeasts and bacteria which are sure to be floating about in the air. It will be seen, then, that unless sterilization is perfect, exclusion of air is of no benefit, and that, on the other hand, no matter how perfect sterilization may be, the air, with its floating microbes (the air itself does no harm), must be kept out.

It is commonly known that vegetables are much more liable to spoil than fruit, hence comparatively few housekeepers attempt to can them. The reason for this greater spoiling tendency is that vegetables present a much better medium for the development of bacteria and their spores (some kinds reproduce themselves by spores or seeds) than does fruit. One boiling of from 10 minutes' to half an hour's duration, is usually sufficient for fruit, for one such boiling will kill all the bacteria. One such boiling will not, however, kill all the spores, and, although the latter are not likely to develop in fruit, they are almost sure to in vegetables. A sure way of keeping the latter has, however, been found out. How it is accomplished "I will now relate," as the old rhyme-books say.

In the first place, it is necessary to have good jars. Mr. Breazeale is not much in favor of the common screw-top "Mason" jar for vegetables. He very much prefers a kind, retailing at about \$1.25 a dozen, with a rubber ring and a glass top, held in place by a wire spring, as shown in illustration. This kind, he says, is more to be depended upon for vegetables, and is even cheaper in the end, since the jars last longer. Wide-mouthed ones should, of course, be chosen for whole fruit or vegetables.

Now, being provided with jars and new rubbers, the next step is to make the boiler, which may be an ordinary tin wash-boiler, ready for use. In the bottom of it should be placed some sort of rack, or support for the jars. This may be made of strips of lath; even a layer of clean straw may do, but the best is a false bottom, made of wire netting, and placed on supports. Next pour about three inches of cold water in the boiler—some put in enough to come up to the necks of the jars, but the other way is as good—and set the perfectly-clean jars (sterilized, if you like to be doubly sure) on the rack. The vegetable may be raw, with cold water added to fill up to the top, or it may have been previously cooked; detailed description will be given below. Now put the rubber ring around the neck, and place the glass top on loosely, as shown in Fig. 2, but be careful not to press down the spring at the side of the jar. By leaving the top thus loose, danger of breakage by steam is avoided. Now put the top on the boiler, bring to a boil, and boil 1 hour, then remove the cover, press down the springs, take the jars out, and let them cool until next day, when the same performance is repeated—be sure to loosen tops before boiling. On the third day, the operation is again repeated, and this time the spring is pressed down for good.

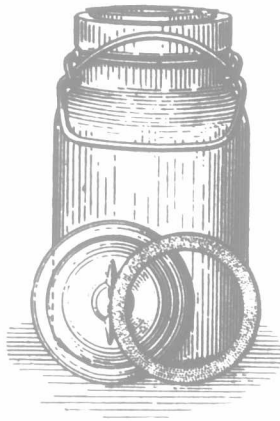
Now, the reason for these three boilings, is as follows: After the first boiling, the bacteria are killed, but the spores remain. These speedily develop, and by the next day a fine crop of bacteria is ready to begin the work of putrefaction. The second boiling destroys these, but there is a chance that a few spores may still remain. These again develop, but the third boiling is usually sufficient to kill the last of them. Some canners just give one boiling, but boil continually for five or six hours, but the method as given above is the one that is always employed in scientific work, and is much to be preferred.

In closing, it may, perhaps, be said, that canning should always be carried on in a well swept and dusted room, in order that as few bacteria as possible may be floating about in the air—also that the hands and clothes of the worker should be perfectly clean. The vegetables should be young and should be gathered early in the morning, while the dew is on. If impossible to set at the work of

canning at once, they should be thrown into cold water to keep them crisp. By this process of canning in the boiler, the cans are sterilized with the fruit, although, to make assurance doubly sure, they may be sterilized before filling.

To Can Corn.—Cut the kernels from the young corn, fill the jars, pour in water to top, and add a teaspoonful of salt, for flavoring, to each quart. Then proceed as above.

Beets.—Can while young and tender. Boil until cooked, and skin before putting in the jars. Fill up with water, or with water and vinegar slightly sweetened.



No. 1.

Squash and Pumpkin.—Cut into dice and proceed as for corn, or else boil and mash before filling. Boil, or steam, for 1½ hours each day.

Peas.—Proceed as for corn.

Asparagus.—Can the young tips only, in the same way as for corn.

Cauliflower, young carrots, and parsnips, may be cooked in pieces, seasoned with salt, and canned as above.

Tomatoes.—Keep best of all, and may be successfully canned in ordinary Mason jars, if great care is taken in sterilizing. May be canned just as fruit ordinarily is. Be sure to boil tops, to dip the rubber rings in boiling water repeatedly before adjusting, and be careful not to put the fingers on the inside of the top or on the inner edge of the rubber.

Succotash.—A mixture of corn and beans, is difficult to keep. Boil 1½ hours each time, instead of 1 hour.

Keep all canned vegetables in a cool, dark place, as light will spoil the color. When opening the spring jar, run a thin knife-blade under the rubber, next to the jar, and press firmly. If it does not yield, place the jar in a deep saucepan of cold water, bring to a boil, and boil a few minutes. The jar will then open easily.

The above directions apply only to pint and quart jars. Half-gallon jars must be boiled longer.

Now, I hope any of you who try this method will have success. Mr. Breazeale says that success is sure to come unless something is done wrong or left undone.

D. D.

On Child-training.

Dear Dame Durden.—After reading the article in "The Farmer's Advocate" of May 27th, "The Boy in Training," I thought I would accept your invitation to write. I am laid aside from active work, with acute muscular rheumatism, and it will help me to forget my discomfort while I write.

I have only had five children. Three lived to manhood and womanhood, but when my eldest boy, a strong, active fellow, was fourteen months old, a most trying time for a young mother, for you cannot imagine what mischief they will be into, my husband's sister came to pay us a visit before going to Muskoka—where her husband had taken up land, and had gone to build a house for them. There was delay upon delay in starting them. One of the children—she had four—fell into the creek and was nearly drowned. Another had a gathering in the ear. Then the second boy had inflammation of the lungs, and, lastly, the mother took ill with bronchitis, and died, leaving four children, the youngest a puny, sickly babe. I never hesitated about keeping the children, and it was not the clothing and feeding them, but I was so ignorant and inexperienced to have the care and training of those children. It is all over. They are all do-

ing well in homes of their own, and the poor, sickly, motherless babe, grew to be a strong man, and has three boys of his own; but our bright, strong, happy boy died, when seventeen months old, with cutting teeth.

I had only one boy of our own to bring up, but many other boys have come under our care, some bright, cheerful, obliging fellows, a pleasure to have them; many are now in good positions. Others were disobedient, careless, disagreeable fellows, and a great trial of patience. One boy we had in our early married life was a particularly trying boy. He was very dirty, both with his clothes and person, and would get out of washing every time that he could, and then he would only half wash. One day when I sent him back to wash again, he said, "What's the use of bein' so particular; wait till the summer comes and I'll wash in the creek. I love to wash in the creek." This was midwinter, and I could not wait till the creek thawed. He would get into trouble, and, not liking to be scolded, would go off and come back again. At last he went away, and we heard nothing from him for thirty years. Early this spring the bell rang, and when I opened the door, there stood a tall, well-dressed, grey-haired man. He did not speak, but looked at me intently for a time. At last he said, "You don't know me," and then he told his name. It was our bad boy back again. He had drifted out to Montana, had been married twenty years, was well off. His wife's home was near Montreal; they had come on a visit to her friends, and he had come to see us. How pleased he was to walk about the place, and how pleased and surprised he was to see the trees he had helped to plant, grown so big. Many things that we had forgotten, he remembered, and with tears in his eyes

had done many times. She sat at my feet, never offered to move. I waited some time and repeated the order, still she did not move. At last I laid down my work and stood her on her feet. Yet she would not go. I reasoned with her, asked why she did not want to do it, if she thought she ought not to hang them up; still she would not speak or move. Then I said, "If you don't go and hang them up I shall whip you." Still she did not move to do it. Then I took her hands and slapped them hard. At last she picked them up and ran and dashed them down beside the cupboard door. "Hang them up," I said. She would not. Just then the bell rang, and I had to go to the door. It was our minister. I showed him in, and asked to be excused for a few minutes, and went back to my rebel. "Hang them up," I said, and she took another hard whipping before she did so. "You're a naughty girl," I said, "go into the corner," and then I went to the caller. He was greatly concerned about the trouble. In a few moments she turned around and stretched out her arms and cried, "Mamma, mamma!" and ran to me. I took her on my lap, kissed and cuddled her up, and she soon went asleep. This was the first time she ever acted so, and I think if I had not conquered her then, there would have been more trouble. Only once again I whipped her. She took to ringing the front door bell, but it got to be a stale and troublesome joke. I explained that it was not nice or kind to take me from my work. Sometimes my hands were in the flour, busy baking, and I had to wash to go to the door, only to see her stand laughing there. So I told her if she did it again I should whip her. Some time passed. One day two ladies called. They had a little girl who stayed out on the lawn with my little girl. We had just been seated and had begun to chat when the bell rang. When I went to the door I heard little feet running away, and went around the corner of the veranda, where the girls were laughing. "I told you I should whip you if you did this again, and I must do it." I took her hands and slapped them. She never did it again.

I always tried to act justly with them, and never deceived them. When they were old enough, each had their little work to do before they went to school. The youngest girl fed and cleaned the birds, the eldest filled and trimmed the lamps. The first job the boy did was to get the kindle wood, and as they grew older they had other things to do.

I allowed them ten cents a week for pocket-money. Of this, each had to give a cent for church, and one for Sunday School collections. This gave them money for anything they wanted for school, and they saved up for birthdays and Christmas presents, and I know they had just as much pleasure in getting their little five- and ten-cent presents, as now, the more-costly ones. When they got older, they had twenty-five cents a week, and when the girls left school, they



No. 2.

he thanked us for our kindness to him when he was a wilful, troublesome boy.

Another of our "bad" boys whom we had not heard from for fourteen years, wrote from Westminster, B. C., thanking us for our kindness to him when he was a "stupid, troublesome boy." These are just two cases. Never regret being kind and patient. "Cast thy bread on the water, for thou shalt find it after many days."

Now, as to the training of my own children: I have sought for grace and wisdom to act justly and lovingly with them, and taught them to regard each other's rights and things, never to take or borrow anything without asking and returning it again. When they were quite young an old minister was billeted with us, and, in talking with me, he said: "In mercy to your children, make them obedient." I never forgot it, and, shortly after I read in the Montreal Witness an article, "Rule with Diligence." It said, so much discomfort in homes, and wrongs to the children, were caused by the parents giving orders and never seeing that they were carried out. This caused endless scoldings and nagging. If you give an order to your child, that it can do and ought to do, see that it obeys, and promptly. This greatly influenced me in dealing with the children.

Your first question, "Do you believe in whipping disobedient children?" Yes; when other means fail. For example, I was sitting sewing one afternoon, my little daughter had eaten a cake and made some crumbs. I told her to go and get the dustpan and handbrush. She did so, I swept the crumbs up and threw them out of the window, and told her to take the pan and brush and hang them up again. It was what she could do, and

each had two dollars a week to buy their clothes, and this enabled them to dress neatly, and as well as any girls in our neighborhood. They have good under-clothes, but they make all their own clothes but their coats, and a good plain coat will last two or three years.

My youngest daughter was only thirteen when she made her first dress. I had been away, and brought them some pretty percale for a dress, and said they must make them. I showed her how to cut them out. I heard her telling not long



No. 3.

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ago how she cried making that dress, she made so many mistakes, put the sleeves in wrong, and had to take them out; but she was praised for it when it was done. I always remember them on their birthdays and at Christmas with something extra, and after housecleaning I get them something, one year a waterproof each, another year tweed to make shirtwaist suits, etc., and now my baby girl is away, and getting \$400 a year and board, so she sends us presents home. I tried to teach them, as far as I was able, how to spend money. I think children, when old enough, ought to have their own money to get or give anything they want to, without asking for every cent, and telling what they want it for. It might be some little gift to a friend, and to have to explain it all, is like pulling a rose to pieces to find were the scent is.

Question 2. It is very wrong and cruel to frighten a child with "the dark," "doctor" or "teacher"; they ought to be taught that they are friends. Our doctor once said to me, "What a wicked thing to frighten a poor child with the doctor!" When he was sent for their temperature would go up, and their hearts beat, so that it was hard to find out the real condition. There is something decidedly wrong with the parents when they have to resort to such methods to enforce obedience. A few days ago, my husband was dining at an hotel, and a well-dressed man and woman, with a boy about three years old, were dining, too. He did not hear what the man said to the boy, but the boy, in a clear, ringing voice, said to his father, "You shut up!" They seemed to think it cute and smart, but I think there is trouble ahead for both parents and child.

I have heard Dr. Gilmore, Warden of the Central Prison, say that the young men that drift into jail are those who have had no parental control, and have never been taught self-control, respect, or obedience. It is a grand thing for a child to love and trust its parents, but this cannot be unless the parents act in a way to inspire love and respect. Don't make playthings, but playmates, of your children. Don't treat them as inferiors, but as junior members of the firm. A horse that has been well-trained and is reliable, is very valuable. A child is worth more than a horse. One of our ministers defined "love" as "helpfulness." Give the little ones a loving, happy childhood, but in mercy to them, make them respectful and obedient.

HELPOABIT.

Welcome back, Helponabit. I hope your letter will inspire others to throw out what help they can on this most important subject.

A Prospective Normalite.

Dear Dame Durden,—I enjoy reading your section of the paper very much, and, having noticed a week or two ago what a kind interest you took in a Normalite, I thought perhaps you would give me a few instructions upon that subject.

I hope to attend Normal School next fall, and, as you know, clothes are the important feature when one is to be away from home for a year. Please give me an account of the amount of these required. Does one have to take summer clothes, and how many? About the middle of September is the opening of the Normal. As regards hats, also, I should like a few hints.

ROSEBUD.

You will not need a great many clothes, as comparatively few of the girls, either at Normal or at the Macdonald Institute, try to make a great sensation in the fashionable world—and very sensible they are—but what you have should be well-made and suitable. For hot-weather school wear, I should think one neat print or foulardine shirtwaist suit, a good, dark skirt (sicilian or lustre are the most serviceable materials you can choose), and three or four light shirtwaists of vesting and French cambric (a sort of fine print, in light colors, that "boils") would be quite sufficient. When winter comes, a dark shirtwaist suit, with, perhaps, a shantung silk waist of the same shade to wear for a change, will put you through. Then, for more dressy wear, you will need one pretty "stuff" dress—voile, or panama, which will do for cool days in summer, and for winter also; a pretty, light mull or muslin, for parties or receptions—there are sure to be some

of these—and, if you can afford it, a cream silk or net waist, which will come in well should you want to go to the theatre. For a coat, you can make one separate coat, with, possibly, a raincoat, answer all purposes. No doubt many of the girls will have suits, and a suit is a very acceptable adjunct, if money is no object. As regards hats, one of the coarse straw, droopy sailors, if becoming, will do finely for school and general wear, with a more dressy hat (simple, not elaborate) for special times. In winter, some of the girls make one ready-to-wear do throughout, while some of the younger ones last winter wore toboggan caps for school.

Now, I think the above list covers most of the essentials. Of course, you will need some pretty neckwear. The Dutch collars and jabots, now so fashionable, brighten up a plain shirtwaist suit wonderfully, as do also the ever-fashionable turn-down collars of embroidered linen, with a bow or "string" tie. If you use frilling, buy net and pleat it to a band. By basting the pleats down you can wash such frilling very well, and so accomplish quite a saving in that way.

Answers to Questions on Bacteria.

(Concluded.)

6. Why is it advisable to leave the salt out of bread- sponge as long as possible in cold weather, but to put it in as early as possible in hot weather?

In answer to this question, several write that they have always been considered good breadmakers, but that they invariably put the salt in when setting the bread, summer or winter. Other answers are as follows:

"I have asked Grandma, who learned to bake in Canada 70 years ago, also a neighbor, and I have read up all I can find—I have a dictionary of Wants, an English book—and no one could tell me more than that they put the salt in when mixing the bread firm."

"In making bread, we are making use of one kind of bacteria. The salt tends to check their growth, and we know they will get check enough in cold weather, but in hot weather they are apt to develop too quickly and cause sour bread, so the salt is put in early to prevent this."

"Salt hinders the yeast plant from working so quickly. Yeast does not rise as well in cold weather, therefore the salt is better left out as long as possible. In hot weather, it rises so quickly that the bread is apt to be sour, therefore the salt should be put in at once."

"This is a new idea to me—but, no doubt, the salt is rather hurtful to the yeast microbe, and in the winter time it is very necessary to encourage the rising of the yeast as much as possible, while in summer it is inclined to rise too fast, and sour. "Down South," they use comparatively little yeast-bread, as it is so liable to go sour."

"In order to give the yeast germs abundance of chance to work, the salt is added last in winter, but in warm weather, the temperature is favorable to the reproduction of germs, so the salt is added sooner to prevent their multiplying too fast."

"In cold weather it is necessary to keep salt out of bread sponge as long as possible so as to hasten the growth of bacteria. We know that salt retards their growth, so does the cold, therefore leave it as long as possible so that sponge will rise. On the other hand, in summer we know that heat is favorable to growth of bacteria, therefore put salt in as soon as possible to retard too rapid development of bacteria, and consequent souring of the bread."

7. Describe the process of caring for milk, from the time the cow is driven into the stable, until the milk is separated, in order that as few pernicious bacteria as possible may be in the milk.

"The one great thing in caring for milk is cleanliness. The milk in the healthy cow's udder is practically germless. So we should keep it as far as possible from coming into contact with anything except clean dishes and pure air. The cows should be brushed every day, and the udder and lower parts wiped off with a damp cloth before milking. The stable should have cement floors. The gutters should be frequently cleaned. The walls should be whitewashed, and an abundance

of sunshine and fresh air admitted. No dusty feeds should be given near milking-time. The milker should be cleanly dressed, and the hands well washed before beginning. The pails and can should have been well washed, thoroughly scalded, and exposed to the air and sun. After separating (which should be done as soon as possible), the cream should be cooled by setting the can in cold water. It should then be closely covered, until wanted."

"In order that as few pernicious bacteria as possible may be in the milk, first the stable must be clean before the cows are driven into it. Have plenty of fresh, clean straw strewn about. Let all the dust from that process, and the feeding process, settle. Brush down the cows, especially all loose hairs and dust about the udder. Wash the teats with lukewarm water, and if you have the cloth for putting over the udder, with the necessary openings made in it, tie it around the cow before milking her. There is no surer way of keeping out all dirt that may fall off the cow."

"Have the milk pails clean, well scalded, and sunned, if possible, likewise all parts of the separator that the milk passes through. When you have milked a pail of milk, send immediately to the separator room. Regulate the time of starting the separator according to quantity of milk you get. Separate as soon as possible."

"The practice of using a little vaseline on the hands when milking is superior to either "wet" or "dry" milking, as it prevents dust from falling, and there is no danger of the filthy "drip." It seems to irritate cows when milked "dry." But by all means use dry hands, if you have not mastered the art of using no more moisture than is needed, or use vaseline and be sure. Under no circumstances dip the finger into the pail to dampen. Milk out a little of the first milk as waste milk. It is generally pretty "blue." You will not suffer much loss in butter, and a few bacteria may have made their way up the opening."

"Possibly one or two more papers on "Bacteria" will be published in the early future; indeed, out of so many good ones, we scarcely know where to stop. Several others will be held over until needed again. D. D.

Recipes.

Individual strawberry shortcakes are pretty, as well as appetizing. To make them, sift together 3 times 1 1/2 cups pastry flour, 1/2 cup cornstarch, a level teaspoon salt, and five level teaspoons baking powder. Work in 1 cup shortening, then add, a little at a time, and mixing with a knife, 1 cup milk. Roll lightly into a sheet, and cut into biscuits. When done, split the cakes, butter, and fill with crushed berries and sugar. Put on individual plates, with whole berries around each cake, and whipped cream on top, or dredge the top with sugar, and serve with a pitcher of plain cream. Raspberries may be used when in.

Potato Salad.—To 2 cups cold boiled potatoes, cut in small cubes, add the chopped white and crumbled yolk of a hard-boiled egg, 1/2 teaspoon salt, 2 level tablespoons mustard pickle chopped fine, 4 olives chopped fine if you have them, a little fresh parsley minced, also 2 slices onion minced. Mix the whole with ordinary salad dressing, or with 4 tablespoons olive oil and 2 of vinegar. Cover closely, and keep cool until time of serving.

Cheese-and-nut Sandwich Filling.—Beat 1/2 cup butter to a cream. Beat in 1/2 cup grated cheese, 1/2 teaspoon of paprika, and 1/2 cup walnut meats sliced fine. Paprika is a sort of pepper, red in color, but much milder than cayenne. It is more wholesome than black pepper, and looks very much prettier.

Sour Cream Biscuit.—To each cup of cream, milk, or buttermilk, beat in 1/2 a level teaspoonful of soda, then use as sweet milk, reducing the quantity of baking powder a little. With cream, use but little shortening.

Drop Cookies with Sour Cream.—1/2 cup butter, 1 cup sugar, 1 egg well beaten, 1/2 cup sour cream, 1/2 teaspoon soda, 2 1/2 cups flour, 3 1/2 level teaspoons baking powder. Mix in the usual manner, stirring the soda into the cream. The mixture will be quite stiff. Drop from a spoon on a buttered pan, shaping each portion into

a smooth round. Dredge with granulated sugar, and bake in a moderate oven.

A Nice Filling for Cream Puffs.—Beat 2 eggs and 2/3 cup sugar until light, and stir into 1 pint boiling milk. When thick, remove from the stove, cool, and flavor with 1/2 teaspoon vanilla.

Summer Salad.—First make the dressing as follows: Rub yolks of 2 hard-boiled eggs to a powder, and add to it 1 teaspoon sugar, 1/2 teaspoon made mustard, pepper and salt to taste, and 1 tablespoon salad oil, or melted butter. Let it stand 5 minutes, then beat in 1/2 cup vinegar. Now cut fine 2 heads lettuce (hearts only), 3 tender radishes, and a small cucumber. Arrange the chopped mixture on the larger lettuce leaves, and pour the dressing over.

Our Scrap Bag.

Now that carpets are no longer in fashion, many people are having their carpets made over into rugs. All that is necessary is to make the carpet smaller and sew all around the square or oblong thus left, a carpet border to match. The left-over strips can then be made into small rugs for bedrooms and halls, with fringe sewn along each end.

A new way to make a rose-jar is as follows: Take the petals off as soon as possible after the flowers are open (you are supposed to have roses "to spare," of course), place them in a basket, and hang in the shade in the fresh air, so that the petals will dry. When they are perfectly dry, so as to leave no danger of moulding, to every quart of petals add the following mixture: A few sprigs of lavender or 2 drops oil of lavender, a drop of bergamot and 3 drops attar of rose. A little heliotrope sachet powder may also be added. Keep in a tightly-closed rose jar, which is only opened occasionally, when an extra-agreeable atmosphere is desired.

To gather goods without a ruffer: If the stitch of the machine is lengthened, and a loose tension used, a row of stitching can be run where the gathering is desired, and the thread pulled until the goods has the desired fullness.

Does My Hat Annoy You?

That question makes me mad. The woman who asks it wears a twelve-inch-high tub inverted on top of her head. To the bottom of the tub she has fastened a flower-bed and the mutilated fragments of an aviary, the two together elevating the structure about six inches higher. It measures four feet across and twelve feet around. It is the across that I mind, and the up and down.

It is a woman of average height, but Pellon on Ossa could not look over her with that thing on her head.

"Does my hat annoy you?"
O, no, madam; not at all! Not in the least little bit of a mite! To be sure, I am a trifle aggrieved at the scantiness of it. If you would only pile on ten more yards of ribbon and a peck of flowers and the loot of three barn-yards, I should have a more generous prospect. But you will do better next month, doubtless. Oh, no! your hat does not annoy me in the least!—Arrow, in C. E. World.

The Secret.

It isn't in doing your work, my boy,
It isn't in doing the thing you must,
That you win the honor and gain the joy.

Or claim the profit or earn the trust,
It isn't in laboring long and late,
And it isn't the hurry and noise that tell;
The smallest thing that you do is great,
If you do it well.

It isn't in getting it done, my boy,
It isn't in getting it out of the way;
It is not in the methods you may employ.

And it's not in the price that your masters pay;
It isn't in squandering precious time,
And it isn't in rushing ahead pell-mell;
If the thing that you do is to be sublime
You must do it well.

—S. E. Kiser, in Chicago Record-Herald.

"The Farmer's Advocate" Fashions.

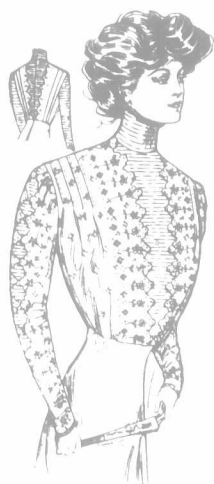


DESIGN BY MAY MANTON.
6357 Pinafore Bodice with Fitted Guimpe.
6157 Three-Piece Skirt

To be made of pongee, linen, fine pique, chambray, gingham, etc.



6335 Child's Dress,
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age. Allow from one to two weeks in which to fill order, and where two numbers appear, as for waist and skirt, enclose ten cents for each number. If only one number appears, ten cents will be sufficient.

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The Roundabout Club

Our Literary Society.

Rabbi Ben Ezra.

STUDY V.—Continued.

Question 5. (Give meaning of Stanzas XXVI., XXXII.)

"The poet, still continuing the metaphor of the 'Potter's Wheel,' goes on to show the folly of those who feast and enjoy life to-day, believing that the past is gone forever and that we have the present only for enjoyment. He goes on to show that every moment of life, past and present, go to form the character and decide the destiny of the soul. We have been created for a definite purpose, and the Creator has planned the process, by which we may be fitted for that purpose. It is well for us, then, if we can steadfastly look upward to the great object of our existence, and not downward to the process itself. Age having come, we can see that all has been planned aright, and can confidently trust the Creator to complete the work as planned, knowing that it shall be perfect."

"The meaning conveyed in these concluding stanzas is so beautifully wrapped in metaphor, it is difficult to disentangle it. As if Fatalism, that refuge of weak characters, was suggested; or Atheism advanced, or Doubt in the Future admitted, or even the precious truths of soul existence and development held in ridicule, the poet, who delighted to penetrate into the inner life of men, to study the soul from whence the action came, is on fire with indignation, argument and proof.

"The climax of thought is reached here. He positively asserts that character or the soul is by far the most important and precious possession. Its growth and development is the only thing really worth while. Had we the 'broader vision' we would see that those things for and against which we struggle so earnestly have no intrinsic importance, but that they are made to seem important, so that we develop and strengthen the soul in our eager pursuit of them.

"There is recognition of God's will expressed, also willing and glad submission, and above all perfect confidence and trust."

Question 6. Some confusion as to what was meant by this question seems to have existed. We really asked for your 'personal' impressions of the poem, after having studied it. Many gave a synopsis of the whole poem. We have made no difference in the scale of marking.

"I have never before been able to appreciate a deep, abstruse poem, as I have in the study of 'Rabbi Ben Ezra.' I have been impressed different times during this study with the value of this abstruse feature. The study and severe thinking that is necessary to 'dig' out the meaning that lies hidden in such a poem, involves a mental discipline, possessed of wondrous value to the person who will undertake the necessary study. Another way in which this kind of literature has impressed its value upon me, in comparison with lighter literature that has its meaning all lying on the surface, is the fact that there is more wealth of thought in such literature. With a lighter piece of literature, one or two readings usually suffices to appropriate all there is in it; but a poem such as 'Rabbi Ben Ezra' may be read and studied over and over again, and new beauties of language and depths of thought will be discovered and impressed upon the mind, as a delightful surprise at every reading.

"Rabbi Ben Ezra" seems to possess a good deal of the philosophy of the ancient stoics, of absolute indifference to the changing circumstances of life, but, without indicating a supreme faith in God as the author and guide of all

things. The Rabbi, through whom Browning speaks, is looking upon life from the vantage ground of old age. He sees the multitude of his fellow men struggling and toiling through life. He sees the frivolities, the conceits, the ambitions of youth. He sees the serious toiling and struggling of men in the prime of life. He sees the vain regrets of old age, and he reflects and moralizes upon the vanities of this world, and having done so, he proceeds to give the rising generation of youth the benefit of his experience and meditation. He advises placing the material things of this life in their proper relation to the interests of eternity. He advises youth not to despise material things; but, on the other hand, not to place too great value upon them, but to recognize them as stepping-stones to a higher life, as aids to the building of character that is to stand the test of eternity. Above all things, amid the distractions of this life, we are to keep our faith in God pure and undefiled, as the Supreme Overseer of the universe."

[The writer of the above made remarkable progress. Beginning among the "mediums" he succeeded in taking almost full marks on the last paper.—Ed.]

"This poem is Browning's psychological masterpiece. Van Dyke tells us that Browning teaches us the courage of faith in God. In no other poem does he teach it so well as in this. It was written under circumstances that would have bowed any heart but his during the anguish of seeing his loved wife's approaching death. Yet he never faltered or questioned the goodness of God. His courageous trust found its highest expression in 'Rabbi Ben Ezra' and 'Prospice.' This faith is the more wonderful when we consider the upheaval of thought that occurred during the early Victorian era. Unrest and doubt were in the air. All his great contemporaries were more or less affected by it.

"This poem teaches us tolerance and sympathy toward the blunders, towering ambitions, and illusions of youth. It is most happy in its presentment of the rest, peace and clear-seeing wisdom of age. It shows us the folly of superficial judgment—the only judgment we are capable of, since God alone knows the heart.

"It does not emphasize soul and scorn the body as a necessary evil, but accounts that one of God's good gifts.

"It points forward to a strange new existence when Death has completed this—on which the soul enters 'fearless and unperplexed' on 'adventures brave and new.'"

"I am perplexed as to what is meant to be given in this answer. My most emphatic impression is that I intend to have a copy of 'Browning' as soon as possible. I began the studies quite unfamiliar with his poems, being of the opinion that his writings were vague and hard to understand, and that when you did search out the meaning there was not much there. This poem is replete with argument and information. Few writings are more appropriate for warning, profit, and instruction, and there is no serious difficulty in comprehending it. The sentences are sometimes intricate, but not as a tangled and knotted thread, but rather a beautiful lace pattern. Perhaps the poet designed to fix these old trite truths in our minds by weaving them more elaborately.

"The ideas are (necessarily) from the subject, mainly drawn from Scriptures. The principles are "orthodox" whatever sect one may belong to, for they are the fundamental principles of moral life. I have been continually reminded of the Book of Job in following these studies. If his work has the effect of sending all his students to Scripture study, Browning will not have lived in vain."

[You will find Stopford Brooke's "Robert Browning," published by Thomas Y. Crowell & Co., New York, a great help in the study of Browning. There is also an "Encyclopedia of Browning," a large, rather expensive book, which might be very valuable. We can find out the name of the publisher if anyone would care to know.]

"The poem 'Rabbi Ben Ezra' fills one with brave courage and cheer. First,

because the poet speaks as if he knew 'whereof he spake,' when he says 'the best is yet to be.' The note of confident assurance sounds throughout the whole poem, and inspires one with faith in the writer. Second, because life is forever. It is not confined to the narrow limits of our earthly pilgrimage. We may attempt great things, knowing surely that we will have time to complete them. 'Man has forever.' Third, we have nothing to discourage us. Our doubts and fears but prove that we belong to a higher order than the brute creation. Our struggles and difficulties but strengthen us and help the soul in its growth beyond the 'developed brute' to the 'God in the germ.' Fourth, our imperfect efforts after what is high and noble are seen and appreciated by God. He judges not by what we attain, but by what we strive to attain. Fifth, though the journey of life may oftentimes be rough and toilsome, yet we are being led by God. He will not leave us, and in the end will take the work which we have tried to do and make it perfect, and He will lead us into a grander, fuller life. This life will be 'perfected by death.'"

"My impression of the poem, as a whole, is that it is a very, very difficult one to fathom, and one that has needed far more time and ability than I have been able to put on its study.

"The poem uniformly teaches the lesson (which is sadly needed) that the last days of man's life should be looked forward to as his best, not as a burden that must be borne. Just as a person rejoices more at the completion of a home than he does when the preliminary excavations are being made, so man's closing years should be passed in thankful reminiscence and hopeful anticipation.

"After reading and studying 'Rabbi Ben Ezra,' how one feels the grandeur and hopefulness of life infinitely more than after perusing lines like the following:—

"We are no other than a moving row
Of magic shadow-shapes that come
and go
Round with the Sun-illumined Lantern
held
In midnight by the Master of the
Show;
"But helpless Pieces of the Game He
plays
Upon the Chequer-board of Nights and
Days;
Hither and thither moves, and checks,
and slays,
And, one by one, back in the closet
lays."
(The Rubaiyat.)
(To be continued.)

In the belief that our readers, especially our students, will be interested, as we have been, we are publishing a number of answers to this last question. Three remain, but will appear, if possible, in next issue.

The New Learning.

They taught him how to hemstitch, and they taught him how to sing,
And how to make a basket out of variegated string,
And how to fold a paper so he wouldn't hurt his thumb—
They taught a lot to Bertie, but he couldn't do a sum.
They taught him how to mold the head of Hercules in clay,
And how to tell the difference 'twixt the bluebird and the jay,
And how to sketch a horse in a little picture-frame—
But, strangely, they forgot to teach him how to spell his name.

Now Bertie's pa was crabbed, and he went one day to find
What 'twas they did to make his son so backward in the mind.
"I don't want Bertie wrecked," he cried in temper far from cool,
"I want him educated!" So he took him out of school.
—Leonard H. Robbins

John Armstrong's Last Good-night.

(Old Ballad.)

Is there never a man in all Scotland,
From the highest state to the lowest degree,
That can shew himself now before the king?
Scotland is so full of their traitery.

Yes, there is a man in Westmerland,
And John Armstrong some do him call;
He has no lands nor rents coming in,
Yet he keeps eightscore men within his hall.

He has horse and harness for them all,
And goodly steeds that be milk-white,
With their goodly belts about their necks,
With hats and feathers all alike.

The king he writ a lovely letter,
With his own hand so tenderly,
And has sent it unto John Armstrong,
To come and speak with him speedily.

When John he looked the letter upon,
Then, Lord! he was as blithe as a bird
In a tree?
"I was never before no king in my life,
My father, my grandfather, nor none of us three.

"But seeing we must go before the king,
Lord! we will go most valiantly;
You shall every one have a velvet coat,
Laid down with golden laces three.

"And you shall every one have a scarlet cloak,
Laid down with silver laces five,
With your golden belts about your necks,
With hats and brave feathers all alike."

But when John he went from Guiltknock Hall,
The wind it blew hard, and full sore it did rain:
"Now fare you well, brave Guiltknock Hall!
I fear I shall never see thee again."

Now John he is to Edenborough gone,
And his eightscore men so gallantly,
And every one of them on a milk-white steed,
With their bucklers and swords hanging down to the knee.

But when John he came the king before,
With his eightscore men so gallant to see,
The king he moved his bonnet to him;
He thought he had been a king as well as he.

"O pardon, pardon, my sovereign liege,
Pardon for my eightscore men and me!
For my name it is John Armstrong,
And a subject of yours, my liege," said he.

"Away with thee, thou false traitor!
No pardon I will grant to thee,
But, to-morrow before eight of the clock,
I will hang thy eightscore men and thee."

O how John looked over his left shoulder!
And to his merry men thus said he:
"I have asked grace of a graceless face,
No pardon here is for you nor me."

Then John pulled out a nut-brown sword,
And it was made of mettle so free;
Had not the king moved his foot as he did,
John had taken his head from his body.

"Come, follow me, my merry men all,
We will scorn one foot away to fly;
It never shall be said we were hung like dogs;
No, we'll fight it out most manfully."

Then they fought on like champions bold—
For their hearts were sturdy, stout,
and free—

Till they had killed all the king's good guard;
There was none left alive but only three.

But then rise up all Edenborough,
They rise up by thousands three;
Then a cowardly Scot came John behind,
And run him thorow the fair body.

Said John, "Fight on, my merry men all,
I am a little hurt, but I am not slain;
I will lay me down for to bleed a while,
Then I'll rise and fight with you again."

Then they fought on like mad men all,
Till many a man lay dead on the plain;
For they were resolved, before they would yield,
That every man would there be slain.

So there they fought courageously,
Till most of them lay dead there and slain,
But little Musgrave, that was his foot-page,
With his bonny grisel got away untaught.

But when he came up to Guiltknock Hall,
The lady spied him presently:
"What news, what news, thou little foot-page?
What news from thy master and his company?"

"My news is bad, lady," he said,
"Which I do bring, as you may see;
My Master, John Armstrong, he is slain,
And all his gallant company."

"Yet thou art welcome home, my bonny grisel!
Full oft thou hast fed at the corn and hay,
But now thou shalt be fed with bread and wine,
And thy sides shall be spurred no more, I say."

O then bespoke his little son,
As he was set on his nurse's knee:
"If ever I live for to be a man,
My father's blood revenged shall be."

"Let Something Good Be Said."

James Whitcomb Riley said:
"When over the fair fame of friend or foe
The shadow of disgrace shall fall—
instead
Of words of blame or proof of thus and so,
Let something good be said.

"Forget not that no fellow-being yet
May fall so low but love may lift his head,
Even the cheek of shame with tears is wet
If something good be said.

"No generous heart may vainly turn aside,
In ways of sympathy—no soul so dead
But may awaken strong and glorified
If something good be said.

"And so I charge ye by the thorny crown,
And by the cross on which the Saviour bled,
And by your own soul's hope of fair renown
Let something good be said."

The Oak.

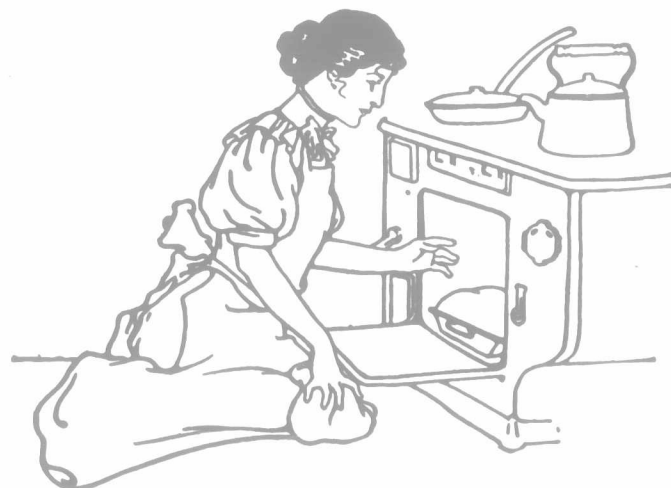
Live thy Life,
Young and old,
Like you oak,
Bright in spring,
Living gold,

Summer-rich
Then, and then
Autumn-changed,
Soberer-hued
Gold again.

All his leaves
Fallen at length,
Look, he stands,
Trunk and bough,
Naked strength.

—Lord Tennyson.

A young artist recently gave his wife her first peep at a picture he had been working on for a wealthy patron. "Why, dear, it's lovely," murmured the better half—"lovely! But I think those sheep look—well, just a trifle too much like clouds—that is, of course, dear—unless they are clouds!"



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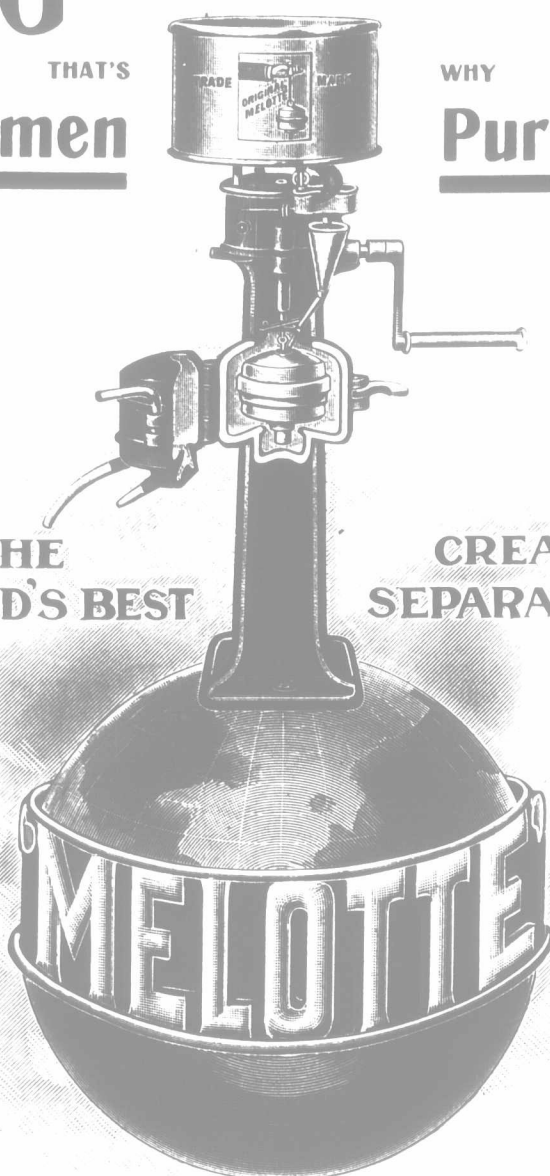
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Not to bend the knee to popular prejudice.

To refuse to make a living in a questionable vocation.

To say "No" squarely when those around you say "Yes."

To be what you are, and not pretend to be what you are not.

To refuse to knuckle and bend the knee to the wealthy, even though poor.

To remain in honest poverty while others grow rich by questionable methods.

To speak the truth when, by a little prevarication, you can get some great advantage.

To live honestly within your means, and not dishonestly upon the means of others.

To stand firmly erect while others are bowing and fawning for praise and power.

To refuse to do a thing which you think is wrong, because it is customary and done in trade.

When mortified and embarrassed by humiliating disaster, to seek in the wreck or ruin the elements of future conquest.

To face slander and lies, and to carry yourself with cheerfulness, grace and dignity for years before the lie can be corrected.

To do your duty in silence, obscurity and poverty, while others about you prosper through neglecting or violating sacred obligations.

To be talked about, and yet remain silent when a word would justify you in the eyes of others, but which you cannot speak without injury to another.

To throw up a position with a good salary when it is the only business you know and you have a family depending upon you, because it does not have your unqualified approval.

To give up what you have, for who, when bidding good-bye, would remark "I must give it up." "I must give it up!" "Give up what?" he was asked. "Golfing." "No," he replied, "the mistress."

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The Girl I Left Behind Me.

"The Girl I Left Behind Me" is of indisputable Hibernian origin, though the exact date of its composition is not certain; but Arthur O'Neil, the celebrated harper, informed Bunting, the greatest authority on Ireland's ancient music that we have, that it had been taught him when he was little more than a child (he was born in 1730), by Owen Keenan, who had had it from a previous harper. O'Neil died in 1815, at the age of eighty-five. As the British army has been largely composed of Irishmen, especially in the foot regiments, ever since the days of Elizabeth, it is conceivable that the musical men of Erin brought the tune into the English bands as a sort of heirloom of their native land. "The Girl I Left Behind Me," according to military tradition, became the parting tune of the British Army and Navy about the middle of the eighteenth century. The air of "The Girl I Left Behind Me" was appropriated by Moore for his pretty ballad, "As Slow Our Ships."

The tune, since it first became popular, has been played for nearly two centuries as a "loath to depart" when a man-of-war weighs anchor, and when a regiment quits the town in which it has been quartered, consequently it has been carried wherever British soldiers and British mariners go. I give the two first stanzas of the Irish version of the song, as sung in camp and on the battlefield, though, of course, it is not the lyric that was first done in Ireland that is lost in obscurity:

The dames of France are fond and free,
And Flemish lips are willing,
And soft the maids of Italy,
And Spanish eyes are thrilling.
Still, though I bask beneath their smile,
Their charms all fail to bind me,
And my heart falls back to Erin's Isle,
To the girl I left behind me.

For she's as fair as Shannon's side,
And purer than its water,
But she refused to be my bride,
Though many a year I sought her,
Yet since to France I sailed away,

Her letters oft remind me,
That I promised never to gainsay
The girl I left behind me.

In one of the regiments quartered in the south of England a century and a half ago, there was an Irish bandmaster who had the not uncommon peculiarity with the sons of Erin of being able to fall in love in ten minutes with any attractive girl he might chance to meet. It never hurt him much, however, for he fell out again as readily as he fell in, and so acquired a new sweetheart in every town the regiment passed through. Whenever the troops were leaving the place where he had a sweetheart, he ordered the band to play "The Girl I Left Behind Me," which, even then, as I have indicated, was an old Irish melody. The story of his accommodating heart soon spread through the army, and other bandmasters, at the request of the officers and soldiers, began to use the tune as a parting melody, and by the end of the eighteenth century it was accounted disrespectful to the ladies of the garrison and the town to march away without playing "The Girl I Left Behind Me," and in this wise it became a stock piece in the repertoire of every British band throughout the wide world.—T. P.'s.

Begin It.

Lose this day loitering, 'twill be the same story

To-morrow, and the next more dilatory;
True indecision brings its own delays,
And days are lost, lamenting over days.
Are you in earnest? Seize the very minute;

What you can do, or think you can, begin it;

Boldness has genius, power, and magic in it.

Only begin it, and the mind grows heated;

Begin it, and the work will be completed.

—Goethe.

Teacher asked her scholars for some very long sentences. One boy wrote "Imprisonment for life."—Driftwood.

Breaking it to Him Gently

An army captain, on returning home from India, brought with him a goodly stock of souvenirs. Among them was a pair of laughing jackasses, which he entrusted to one of the sailors, Tom Pinch. Alas, the unaccustomed ship-board life did not agree with the creatures, and in spite of all Tom's care they pined, and finally died. When he discovered the catastrophe Tom was in despair. "I say, Jim," he called to a comrade, "here's a nice thing, I daren't tell the captain." "Don't shirk it, mate," was Jim's advice. "Break it to him gently. You'll find it'll be all right." The advice seemed good, and Tom sought the gallant captain. "Scuse me, sir," he said. "You know them things below—what you call larfin' jackasses?" "Yes." "Well, sir, they ain't got noffin' to laugh at this mornin'."

"Tommy," said a young lady visitor at his home, "why not come to our Sabbath school? Several of your little friends joined us lately."

Tommy hesitated a moment, then suddenly he exclaimed, "Does a red-headed kid by the name of Jimmy Brown go to your school?"

"Yes, indeed," replied the new teacher. "Well, then," said Tommy, with an air of interest, "I'll be there next Sunday, you bet. I've been layin' for that kid for three weeks and never knew where to find him."

TOO DEAD FOR A FUNERAL.

Billy Martin, aged four, came to his mother, and in great ecstasy, exclaimed, "Oh, mother! Louise and Carberry found such a nice dead cat, and they are going to have a funeral, and can I go?" Permission was given, and when Billy returned he was questioned as to the outcome of the funeral. "They did not have it at all." "And why not?" "Mother," was the answer, "the cat was too dead."

The Odor of Sanctity.

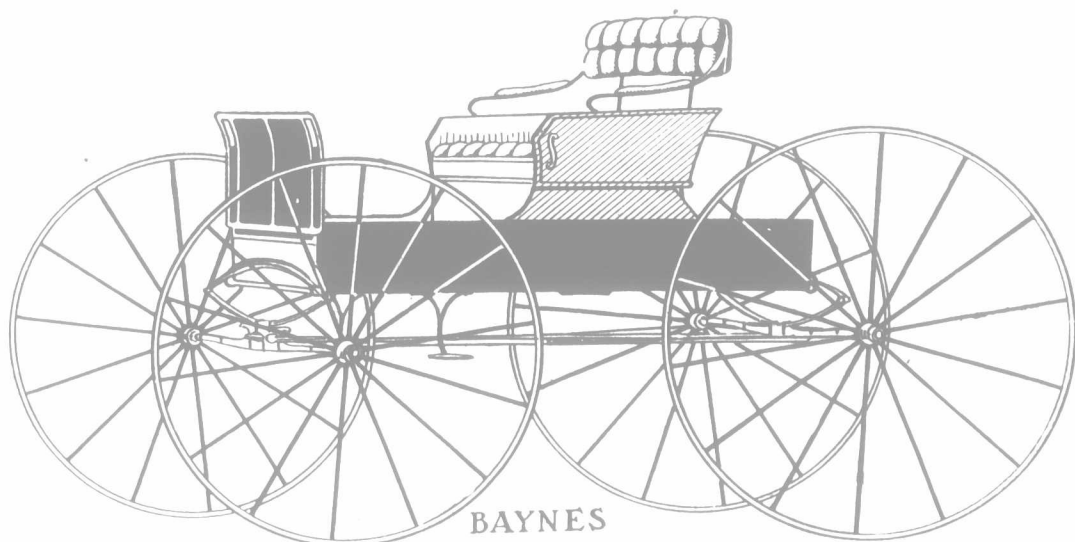
A singular article has appeared in the French paper "La Nature." The writer is discussing the question—an odd one enough—as to whether the English have a "national odor" by which they may be recognized. He goes on to state that, however it may be with "our neighbors on the other side of the Channel," there are certainly "color odors" strongly perceptible when two different races come into contact. White men find Chinese and negroes unpleasant companions, while negroes and Chinese say that Europeans have "an odor of death." And then the author of the article refers briefly to the traditions which ascribe delightful odors to the saints, and I am reminded that the phrase at the head of this column, now a mere metaphor, was once taken in its literal sense.

The association of sanctity with sweet savors is an early one. St. John speaks of the golden vials full of odors, which he saw in his vision, as symbolizing the prayers of the saints; and when St. Polycarp, the disciple of St. John, was martyred, the Christians present perceived an odor as of incense to rise from his body as it was consumed in the flames. A similar odor was perceived at the natural decease of an early French saint; and, again, in the (eleventh century) life of St. David, we are told that on the death of the saint the whole city was filled with celestial odors. Indeed, in some of the Welsh legends these mystic savors have lost all connection with death; there is one story which tells how certain holy men succeeded in finding that blessed Isle "beyond the waves of the ocean" which so many of the hermits and monks of Celtdom sought in early ages. And when these saints returned from the Isle, all their garments were sweet-scented—they diffused "rare odors of Paradise."

But there is one very late story which connects, not perhaps sanctity, but extreme innocence and goodness, with a mysterious fragrance. When the Princesse de Lamballe was most brutally murdered by the Republicans, the whole square was said to be filled with the scent of roses; and so far as I know this is the latest recorded instance of the kind. Of course, there is one very simple way of dealing with these stories, and that is to say that they are a pack of lies, or, at the best, olfactory hallucinations. Personally, I should not care to take that easy course. When you have once abandoned the reason of pure mathematics, it is dangerous and unphilosophical to say that anything is impossible; and then it seems to me that, in spite of many doubts and confusions and impostures, a remarkable truth is gradually emerging. This is, that the channels of sense may be, and are, affected by super-sensible agencies. The columns of T. P.'s Weekly have recently borne witness to the existence of super-sensible sight; I see no reason why we should on a priori grounds discredit the existence of super-sensible odor.—T. P.'s Weekly.

ONE ON CARNEGIE.

Andrew Carnegie, at a dinner given in his honor in New York, told a story at his own expense. "I was travelling on an English railway Londonward last year," he said, "and had chosen a seat in a non-smoking carriage. At a way station a man boarded the train, sat down in my compartment, and lighted a pipe. 'This is not a smoking carriage,' said I. 'All right, governor,' said the man, 'I'll just finish this pipe here.' He finished it, then refilled it again. 'See here,' said I, 'I told you this wasn't a smoking carriage. If you persist with that pipe I shall report you at the next station to the guard.' I handed him my card. He looked at it, pocketed it, but lighted his pipe again. At the next station, however, he changed to another compartment. Calling a guard, I told him what had occurred, and demanded that the smoker's name and address be taken. 'Yes, sir,' said the guard, and hurried away. In a little while he returned. He seemed rather awed. He bent over me and said apologetically, 'Do you know, sir, if I were you I would not prosecute that gent. He has just given me his card. Here it is.' He is Andrew Carnegie."



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A Lesson in Courage.

In Watterson's "History of the Spanish-American War" there is a fine story. "Talk about your generals!" said the regular. "Chaffee's the old boy for my money. I found out what he was at El Caney. My company was at work digging trenches, and while we were finishing up one of the Spaniards began to fire, and the bullets sang their pretty tunes nigh to our heads. Well, there was a kid in the company that couldn't have been over eighteen. Never ought to have let him enlist at all. He was always complaining and kicking, and at the first fire down he went flat on his face, and lay there. One of the men kicked him, but he didn't stir. Then along came Chaffee, cool and easy, and sees the kid. 'Hello, there!' says Chaffee. 'What's the matter, you fellow down there?' Get up and fight with your company.' 'No, I can't,' whines the kid. 'Can't?' says Chaffee, jumping down into the trench and hauling the boy up. 'What's the matter with you that you can't?' 'Are you hurt?' 'No, sir,' says he, 'I'm scairt. I'm afraid of getting hit.' 'Well, you're a fine soldier!' says the General. Then he looked at the boyish face of the lad, and his face kind of softened. 'I suppose you can't help it,' he said. 'It ain't so much your fault. I'd like to get hold of the fellow that took you into the army.' I suppose any other general would have sent the boy to the rear in disgrace, and that would

have been the end of it; but Chaffee stood there, with the bullets kiyiyig around him, beside the boy, who had crouched down again, and thought, with his chin in his hand.

LIKE A VETERAN.

"Ey and by he put his hand on the boy's shoulder. 'There isn't as much danger as you think for,' said he. 'Now, get up and take your gun and fight, and I'll stand here by you.' The boy got up, shaking like a leaf, and fired his first shot pretty near straight in the air. 'That's pretty high,' says the General. 'Keep cool, and try again.' Well, in three minutes that scairt kid was fighting like a veteran and cool as a cucumber, and when he saw it, the General started on: 'You're all right now, my boy,' he said. 'You'll make a good soldier.' 'God bless you, sir!' said the youngster. 'You saved me from worse than death,' and he was pretty close to crying when he said it. After a while the order came to retire from the trench, and we had just to collar that young fellow and haul him away by the neck, to get him to retreat with the company. In the rest of the fights there was not a better soldier in the company."—[T. P.'s Weekly.

Out of Order.

Champ Clark loves to tell of how in the heat of a debate Congressman Johnson, of Indiana, called an Illinois representative a jackass. The expression was unparliamentary, and in retraction Johnson said: "While I withdraw the unfortunate word, Mr. Speaker, I must insist that the gentleman from Illinois is out of order." "How am I out of order?" yelled the man from Illinois. "Probably a veterinary surgeon could tell you," answered Johnson, and that was parliamentary enough to stay on the record.—[Success Magazine.

Brevities.

An inner choice to do right is much better than an outward restraint from doing wrong.

Listen to the man who speaks of what he knows better than you do. He is competent to be your teacher.

When you see a man busy following his own advice, keep him company. He is not otherwise a safe counsellor.

The proper discharge of duty to-day is the best preparation for the performance of larger tasks to-morrow.

Do your best! Work that is indifferently done may cost little time and labor, but it is the dearest in the end. Only thoroughness really pays.

When a young man prides himself that he is the victim of but a single vice, remind him of Bishop Hall's remark: "Vices are seldom single."

A youth with only ordinary talent, but extraordinary diligence, will likely accomplish more than one who has been considered a "genius" by his friends.

Edison was once asked by a youth, "Do you not think that genius is inspiration?" The electrical wizard replied, "No, not inspiration, but perspiration." Do you perspire?

We have known many fathers, "good, bad, and indifferent," but we never knew one who did not want his son to be a better man than his sire, no matter how good or how bad he himself was.

The first book a boy reads is not the Bible, but his father's life, and it is a sad thing for the son, and a sadder thing for the father, if when the lad grows and reads the Book, he finds that it contradicts what he has already read in his father's life.—[Epworth Era.

Mary, aged five years, and Stella, who was about the same age, were talking about their future dreams.

"When I grow up," said Mary, "I'm going to be a school teacher."

"Well, I'm going to be a mother with four children," said Stella.

"Well, when they come to my school I'm going to whip them, whip them, whip them!"

"You mean thing!" said Stella, as the tears came into her eyes. "What have my poor children ever done to you?"

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WANTED—Persons to grow mushrooms for us at home. Waste space in cellar, garden or farm can be made to yield \$15 to \$25 per week. Send for illustrated booklet and full particulars. Montreal Supply Co., Montreal.



POULTRY AND EGGS
Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

EGGS HALF PRICE—Black Minorcas, Banded Rocks and Brown Leghorns. A few choice hens for sale. C. Day, Highgate, Ont.

S. C. WHITE LEGHORNS of prizewinning strains. Eggs priced for remainder of season, 75c. for 15, hatch guaranteed. Geo. D. Fletcher, Binkham, Ont., Erin Station.

"She's awfully generous." "What does she give away?" "All the secrets she knows."

The Evening Wind.

Spirit that breathest through my lattice, thou
That cool'st the twilight of the sultry day!
Gratefully flows thy freshness round my brow;
Thou hast been out upon the deep at play.
Riding all day the wild blue waves till now,
Roughening their crests, and scattering high their spray.
And swelling the white sail. I welcome thee
To the scorched land, thou wanderer of the sea!

Nor I alone,—a thousand bosoms round
Inhale thee in the fullness of delight;
And languid forms rise up, and pulses bound
Livelier, at coming of the wind of night;
And languishing to hear thy graceful sound,
Lies the vast inland, stretched beyond the sight.
Go forth into the gathering shade go forth,—
God's blessing breathed upon the fainting earth!

Go, rock the little wood-bird in his nest;
Curl the still waters, bright with stars, and rouse
The wide old wood from his majestic rest,
Summoning from the innumerable boughs,
The strange, deep harmonies that haunt his breast.
Pleasant shall be thy way where meekly flows
The shutting flower, and darkling waters pass,
And where the o'er-shadowing branches sweep the grass.

Stoop o'er the place of graves, and softly sway
The sighing herbage by the gleaming stone,
That they who near the churchyard willows stray,
And listen in the deepening gloom, alone,
May think of gentle souls who passed away,
Like thy pure breath, into the vast unknown;
Sent forth from heaven along the sons of men,
And gone into the boundless heaven again.

The faint old man shall lean his silver head
To feel thee; thou shalt kiss the child asleep,
And dry the moistened curls that over-spread
His temples, while his breathing grows more deep;
And they who stand about the sick man's bed,
Shall joy to listen to thy distant sweep,
And softly part his curtains to allow
Thy visit, grateful to his burning brow.

Go—but the circle of eternal change,
Which is the life of nature, shall restore,
With sounds and sense from all thy mighty range
Thee to thy birthplace of the deep once more;
Sweet odors in the sea-air, sweet and strange,
Shall tell the homesick mariner of the shore;
And, listening to the murmur, he shall deem
He hears the rustling leaf and running stream.

William Colton Bryant.

Two football enthusiasts who had come into Glasgow to see the final for the Scottish Cup, were dining in one of the city's palatial restaurants.

When they were leaving, one of them returned and gave the waiter a tip. The other, surprised at the unusual generosity, asked for an explanation.

"Hand yer tongue, man, he deserves it. Look at the grand mahogany table in me."

The Golden Dog

(Le Chien D'Or.)

A Canadian Historical Romance.

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CHAPTER XXI.—Continued.

The young soldier laughed merrily. "If fame, immortality and true love are to be mine, what care I for death? It will be worth giving up life for, to have the tears of the maids and matrons of New France to lament your fate. What could the most ambitious soldier desire more?" The words of Jumonville struck a kindred chord in the bosom of Hortense de Beauharnais. They were stamped upon her heart forever. A few years after this prediction, Jumonville de Villiers lay slain under a flag of truce on the bank of the Monongahela, and of all the maids and matrons of New France who wept over his fate, none shed more and bitterer tears than his fair, betrothed bride, Hortense de Beauharnais.

The prediction of the Sieur Gauthier was repeated and retold as a strangely-true tale; it passed into the traditions of the people, and lingered in their memory generations after the festival of Belmont was utterly forgotten.

When the great revolt took place in the English colonies, the death of the gallant Jumonville de Villiers was neither forgotten nor forgiven by New France. Congress appealed in vain for union and help from Canadians. Washington's proclamations were trodden under foot, and his troops driven back or captured. If Canada was lost to France partly through the death of Jumonville, it may also be said that his blood helped to save it to England. The ways of Providence are so mysterious in working out the problems of national existence that the life or death of a single individual may turn the scales of destiny over half a continent. But all these events lay as yet darkly in the womb of the future. The gallant Jumonville who fell, and his brother Coulon who took his "noble revenge" upon Washington by sparing his life, were to-day the gayest of the gay throng who had assembled to do honor to Pierre Philibert.

While this group of merry guests, half in jest, half in earnest, were trying to discover in the stars the "far-reaching concord" that moulded the life of each, Amelie led her brother away from the busy grounds near the mansion, and took a quiet path that led into the great park which they entered.

A cool, salt-water breeze, following the flood tide that was coming up the broad St. Lawrence, swept their faces as Amelie walked by the side of Le Gardeur, talking in her quiet way of things familiar, and of home interests, until she saw the fever of his blood abate and his thoughts return into calmer channels. Her gentle craft subdued his impetuous mood—if craft it might be called—for more wisely cunning than all craft is the prompting of true affection, where reason responds like instinct to the wants of the heart.

They sat down upon a garden seat overlooking the great valley. None of the guests had sauntered out so far, but Amelie's heart was full; she had much to say, and wished no interruption.

"I am glad to sit in this pretty spot, Amelie," said he, at last, for he had listened in silence to the sweet, low voice of his sister as she kept up her half-sad, half-glad monologue, because she saw it pleased him. It brought him into a mood in which she might venture to talk of the matter that pressed sorely upon her heart.

"A little while ago, I feared I might offend you, Le Gardeur," said she, taking his hand tenderly in hers, "if I spoke all I wished. I never did offend you that I remember, brother, did I?"

"Never, my incomparable sister; you never did, and never could. Say what you will, ask me what you like; but I fear I am unworthy of your affection, sister."

"You are not unworthy; God gave you as my only brother; you will never be unworthy in my eyes. But it touches me to the quick to suspect others may think lightly of you, Le Gardeur."

He flinched, for his pride was touched, but he knew Amelie was right. "It was weakness in me," said he. "I confess it, sister. To pour wine upon my vexation in hope to cure it, is to feed a fire with oil. To throw fire into a powder magazine were wisdom compared with my folly, Amelie; I was angry at the message I got at such a time. Angélique des Meloises has no mercy upon her lovers!"

"Oh, my prophetic heart! I thought as much! It was Angélique, then, who sent you the letter you read at table?"

"Yes, who else could have moved me so? The time was ill-chosen, but I suspect, hating the Bourgeois as she does, Angélique intended to call me from Pierre's fête. I shall obey her now, but to-night she shall obey me, decide to make or mar my one way or other. You may read the letter, Amelie, if you will."

"I care not to read it, brother; I know Angélique too well not to fear her influence over you. Her craft and boldness were always a terror to her companions. But you will not leave Pierre's fête to-night?" added she, half-impudently, for she felt keenly the discourtesy to Pierre Philibert.

"I must do even that, sister! Were Angélique as faulty as she is fair, I should only love her the more for her faults, and make them my own. Were she to come to me like Herodias, with the Baptist's head in a charger, I should outdo Herod in keeping my pledge to her."

Amelie uttered a low, moaning cry. "O my dear, infuriated brother, it is not in nature for a *De Repentigny* to love irrationally like that! What maddening philtre have you drunk, to intoxicate you with a woman who uses you so imperiously? But you will not go, Le Gardeur?" added she, clinging to his arm. "You are safe so long as you are with your sister—you will be safe no longer if you go to the *Maison des Meloises* to-night!"

"Go I must and shall, Amelie! I have drunk the maddening philtre—I know that, Amelie, and would not take an antidote if I had one! The world has no antidote to cure me. I have no wish to be cured of love for Angélique, and in fine I cannot be, so let me go and receive the rod for coming to Belmont, and the reward for leaving it at her summons!" He affected a tone of levity, but Amelie's ear easily detected the false ring of it.

"Dearest brother," said she, "are you sure Angélique returns, or is capable of returning love like yours? She is like the rest of us, weak and fickle, merely human, and not at all the divinity a man in his fancy worships when in love with a woman." It was vain, however, for Amelie to try to persuade her brother of that.

"What care I, Amelie, so long as Angélique is not weak and fickle to me?" answered he, "but she will think her tardy lover is both weak and fickle unless I put in a speedy appearance at the *Maison des Meloises*." He rose up as if to depart, still holding his sister by the hand.

Amelie's tears flowed silently in the darkness. She was not willing to plant a seed of distrust in the bosom of her brother, yet she remembered bitterly and indignantly what Angélique had said of her intentions towards

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W. NICHOLSON, FLESHERTON P. O., ONT.

the Intendant. Was she using Le Gardeur as a foil to set off her attractions in the eyes of Bigot?

"Brother!" said Amelie, "I am a woman, and comprehend my sex better than you. I know Angelique's far-reaching ambition and crafty ways. Are you sure, not in outward persuasion, but in inward conviction, that she loves you as a woman should love the man she means to marry?"

Le Gardeur felt her words like a silver probe that searched his heart. With all his unbounded devotion, he knew Angelique too well not to feel a pang of distrust sometimes, as she showered her coquetries upon every side of her. It was the overabundance of her love, he said, but he thought it often fell like the dew round Gideon's fleece, refreshing all the earth about it, but leaving the fleece dry. "Amelie!" said he, "you try me hard, and tempt me, too, my sister, but it is useless. Angelique may be false as Cressida to other men, she will not be false to me." She has sworn it, with her hand in mine, before the altar of Notre Dame. I would go down to perdition with her in my arms rather than be a crowned king, with all the world of women to choose from, and not get her."

Amelie shuddered at his vehemence, but she knew how useless was expostulation. She wisely refrained, deeming it her duty, like a good sister, to make the best of what she could not hinder. Some jasmynes overhung the seat, she plucked a handful, and gave them to him as they rose to return to the house.

"Take them with you, Le Gardeur," said she, giving him the flowers, which she tied into a wreath, they will remind Angelique that she has a powerful rival in your sister's love."

He took them as they walked slowly back. "Would she were like you, Amelie, in all things!" said he. "I will put some of your flowers in her hair to-night for your sake, sister."

"And for her own! May they be for you both an augury of good! Mind and return home, Le Gardeur, after your visit. I shall sit up to await your arrival, to congratulate you," and after a pause she added, "or to console you, brother!"

"Oh, no fear, sister!" replied he, cheerfully. "Angelique is true as steel to me. You shall call her my betrothed to-morrow! Good-by! And now go dance with all delight till morning." He kissed her and departed for the city, leaving her in the ball-room by the side of the Lady de Tilly.

Amelie related to her aunt the result of her conversation with Le Gardeur, and the cause of his leaving the fete so abruptly. The Lady de Tilly listened with surprise and distress. "To think," said she, "of Le Gardeur asking that terrible girl to marry him! My only hope is she will refuse him. And if it be as I hear, I think she will!"

"It would be the ruin of Le Gardeur if she did, aunt! You cannot think how determined he is on this marriage."

"It would be his ruin if she accepted him!" replied the Lady de Tilly. "With any other woman Le Gardeur might have a fair chance of happiness, but none with her! More than one of her lovers lies in a bloody grave by reason of her coquetries. She has ruined every man whom she has flattered into loving her. She is without affection. Her thoughts are covered with a veil of deceit impenetrable. She would sacrifice the whole world to her vanity. I fear, Amelie, she will sacrifice Le Gardeur as ruthlessly as the most worthless of her admirers."

"We can only hope for the best, aunt; and I do think Angelique loves Le Gardeur as she never loved any other."

They were presently rejoined by Pierre Philibert. The Lady de Tilly and Amelie apologized for Le Gardeur's departure—he had been com-

elled to go to the city on an affair of urgency, and had left them to make excuses. Pierre Philibert was not without a shrewd perception of the state of affairs. He pitied Le Gardeur and excused him, speaking most kindly of him in a way that touched the heart of Amelie. The ball went on with unflagging spirit and enjoyment. The old walls fairly vibrated with the music and dancing of the gay company.

The music, like the tide in the great river that night, reached its flood only after the small hours had set in. Amelie had given her hand to Pierre for one or two dances, and many a friendly, many a half-envious guess was made as to the probable Chatelaine of Belmont.

CHAPTER XXII.

So Glozed the Tempter.

The lamps burned bright in the boudoir of Angelique des Meisoises on the night of the fete of Pierre Philibert. Masses of fresh flowers filled the antique Serves vases, sending delicious odors through the apartment, which was furnished in a style of almost royal splendor. Upon the white hearth a few billets of wood blazed cheerfully, for, after a hot day, as was not uncommon in New France, a cool salt-water breeze came up from the great river, bringing reminders of the cold, sea-washed rocks and snowy crevices still lingering upon the mountainous shores of the St. Lawrence.

Angelique sat idly watching the wreaths of smoke as they rose in shapes fantastic as her own thoughts.

By that subtle instinct which is a sixth sense in woman, she knew that Le Gardeur de Repentigny would visit her to-night and renew his offer of marriage. She meant to retain his love and evade his proposals, and she never for a moment doubted her ability to accomplish her ends. Men's hearts had hitherto been but potter's clay in her hands, and she had no misgivings now; but she felt that the love of Le Gardeur was a thing she could not tread on without a shock to herself like the counter-stroke of a torpedo to the naked foot of an Indian who rashly steps upon it as it basks in a sunny pool.

She was agitated beyond her wont, for she loved Le Gardeur with a strange, selfish passion, for her own sake, not for his—a sort of love not uncommon with either sex. She had the frankness to be half-ashamed of it, for she knew the wrong she was doing to one of the most noble and faithful hearts in the world. But the arrival of the Intendant had unsettled every good resolution she had once made to marry Le Gardeur de Repentigny and become a reputable matron in society. Her ambitious fantasies dimmed every perception of duty to her own heart, as well as his; and she had worked herself into that unenviable frame of mind which possesses a woman who cannot resolve either to consent or deny, to accept her lover or to let him go.

The solitude of her apartment became insupportable. She sprang up, opened the window, and sat down in the balcony outside, trying to find composure by looking down into the dark, still street. The voices of two men engaged in eager conversation reached her ear. They sat upon the broad steps of the house, so that every word they spoke reached her ear, although she could scarcely distinguish them in the darkness. These were no other than Max Grimeau and Blind Bartemy, the brace of beggars whose post was at the gate of the Basse Ville. They seemed to be comparing the amount of alms each had received during the day, and were arranging for a supper at some obscure-haunt they frequented in the purlieus of the lower town, when another figure came up, short, dapper, and carrying a knapsack, as Angelique could detect by the glimmer of a lantern that hung on a rope stretched across the street. He was greeted warmly by the old mendicants.

(To be continued.)

Consumption Book

200 PAGE MEDICAL BOOK ON CONSUMPTION

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This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

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500 " " 7 1-4c. "

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saying in which paper you saw this advt. and the number of cattle you have, and we will tell you how to prevent Abortion in cows.

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My new importation of 24 Clydesdale stallions is now in my stables. I invite inspection and comparison. I think I have the best lot for size, style, character, quality and action ever imported. 27 Clyde stallions and 8 Hackney stallions to select from. Prices right, and terms to suit.

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CLYDESDALES AND SHORTHORNS.—Both imported and Canadian-bred, at Columbus, Ont., the Home of the Winners. Our last importation landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marsella, Sir Evedrest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 6 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance phone in houses. Phone office, Myrtle station. Myrtle station, C.P.R.; Brooklyn station, G.T.R.; Oshawa station, G.T.R. Smith & Richardson & Sons, Columbus, Ont.

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IMPORTED SHIRES At their St. Thomas stables, the John Chambers & Sons, of England, have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address DR. C. K. GEARY, St. Thomas, Ont.

Clydesdales and Hackneys We have for sale a few choice Clydesdale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions, Hackney stallions and mares for sale always. HODGKINSON & TISDALE, BEAVERTON, ONTARIO, G. T. R. and C. N. R. Long-distance phone.

I HAVE STILL LEFT THREE CLYDESDALE STALLIONS two of them 3 years old, the other a 4-year-old; big flashy fellows, full of quality, and character, and right royally bred. I will sell them cheap and on terms to suit, as I want the room for a new importation. T. D. ELLIOTT, BOLTON, ONT.

IMPORTED CLYDESDALES My new importation of Clydesdale stallions and fillies, landed a short time ago, are an exceptionally choice lot, full of flashy quality, style and character, and right royally bred. I will sell them at very close prices, and on terms to suit. C. W. BARBER, Gatineau Point, Quebec. "Close to Ottawa."

Clydesdales and Hackneys I still have on hand a few of them fit for show horses. Prices moderate. Terms to suit. Full particulars will be cheerfully given to anyone asking for same. I. L. MERCEUR, MARKDALE, ONT. P. O. and Station. Long-distance phone 17.

QUESTIONS AND ANSWERS. Miscellaneous.

BLOODY MILK.

What will cure a cow that gives bloody milk out of one quarter? She has been that way for about a month. W. M.

Ans.—This trouble is generally due to rupture of some of the small blood vessels of the udder, and, while the flow of blood can usually be checked, recurrence of the trouble cannot be prevented. Bathe the affected quarters long and often with cold water and give one ounce tincture of iron in a pint of cold water as a drench three times daily until blood ceases to flow. Milking should be performed gently to avoid recurrence.

U. E. LOYALIST LANDS.

My father was a son of a U. E. L., and his grant came to him in Middlesex County. Through some deal he let it go, but my mother never signed her rights away. My father has been dead twenty-two years. After his death, parties came from there to get my mother to sign her rights away, but she refused, and has died since. It is now seventeen years since she died.

Have we, their children, any chance of claiming the said property? If so, what would be the right way to go about it? Ontario. A READER.

Ans.—We do not see that you are in a position to assert a claim in the premises with any reasonable prospect of success.

HORSE-RADISH.

On a farm I have recently purchased there is a small patch of about a quarter of an acre of horse-radish, which it seems impossible to get rid of. Can you tell me of any good way to kill it out? So long as it is watched, it does not spread, but I do not like it on the place, and will use any necessary measure to get rid of it. NEW SUBSCRIBER.

Ans.—A correspondent of an American exchange three years ago, reported that he had killed a patch of horse-radish by enclosing it (merely by chance) in a small hog pasture. He says the pigs went for it ravenously, digging the roots out and eating them. In a short time they had it permanently eradicated. At present prices of hogs, this would seem to be a very economical way of exterminating it. If this is not convenient, we see no reason why plowing and cultivating, with a crop such as rape, should not be effectual.

MILKWEED.

Could you tell me any way of destroying milkweed? I have a field nearly covered with it. Last year I had roots on the field, and was careful not to let any seed, and sowed oats this year, and it is covered with the weed. Would summer-fallowing kill it? E. N. M.

Ans.—Milkweed is a very persistent weed, although not usually counted a very bad one. After one thinks he has it exhausted, he will be surprised to see it still coming up. One would think thorough cultivation of a hoe crop would finish it, but, apparently, a couple of successive seasons of cultivation are required in this case. In general, the method recommended for milkweed is the same as for Canada thistle, namely, repeated cultivation, to prevent the plant breathing, and thus finally to exhaust the rootstocks. Either a summer-fallow or hoe crop will afford this opportunity.

LUMP IN TEAT—LAME HORSE.

Being a great reader of the ever-welcome "Farmer's Advocate," I thought I would ask two or three questions.

1. I have a cow with lump about middle of one teat, just been there for a few days, all right up to that time. What is the cause, and is there any remedy?

2. Have a horse, 7 years old, has a big hock joint, been there a short time, goes a little lame when trotting, but could not notice when walking, have blistered once, appear like a bog or thrombophin. Please advise through the columns of "The Farmer's Advocate." SUBSCRIBER.

Ans.—1. Not much can be done in such a case. Bathe the teat with hot water after milking, and apply iodine tincture or iodine, with the coloring eliminated, around the part where the lump is formed. Wash before milking.

2. Repeated blistering would be the most effective remedy. D. F. DRAKE.

each of resublimed crystals of iodine, iodide of potassium and iodide of ammonium, and 5 ounces each of alcohol and glycerine. Apply with smart friction, once daily.

CHICKS DYING.

Young chicks are just getting feathers. They begin to walk slowly, with feathers fluffing out, look pale and refuse to eat, and are dead in about three days. Do not notice bowel trouble unless just at the last. They are fed mixed chick feed, corn, cracked and small wheat, plenty of fresh water, and run where they please. Is it for want of proper grit? Found that adding carbolic acid to drinking water improved condition of older chicks. MRS. G. W. H.

Ans.—I have raised many thousands of chicks, and have never had such an experience as related by your correspondent. My chicks were no better fed, except that they had a certain quantity of soft food. The trouble is not from want of grit, for the chicks run where they please, so have opportunity to pick up all the grit they require. It looks as if the chicks had taken something poisonous. Could they possibly get at the drink water charged with carbolic acid and intended only for the older chickens? The chicks have, evidently, been well cared for, and should thrive well, unless they have access to something injurious. Give a good condition powder to all the chicks. A. G. G.

HARVESTING ALSIKE CLOVER.

1. What is the proper time to cut alsike clover for seed?

2. What is the best way to harvest it when you have no side-delivery rake?

3. Will there be enough alsike seed fall off for a crop another year, or do you get only one crop? W. M.

Ans.—1. The crop is ready for harvesting when nearly all the heads are fully matured. The bloom will then have left them, and they will be of a reddish cast. The earlier heads will have turned a dark color, almost black. Some bloom may yet linger on the later and smaller heads, but harvesting should not be delayed until these mature.

2. With a self-rake reaper. If this is not available, then with the self-binder, the sheaves being thrown off unbound. Most farmers cut it with the mower, with a platform attachment to the cutter bar, a man walking after it and raking, or forking, off the hay in bunches.

3. Yes, in a favorable season, on moist or porous soils, it may be possible to renew the crop almost indefinitely by simply allowing some heads to seed every year and fall to the ground.

INFRINGEMENT OF PATENT.

We have had some discussion over the rights of a patentee. It is with regard to a harrow cart made by a man near here, and he has it patented, not only as a harrow cart, but also the riding device for the Province of Quebec. Some of the boys said that they could make one for their own use only, and he could not touch them, but the man that got out the patent said if he found out anyone making a harrow cart of any device, that is, to ride after the harrow, he would have a best case made of two months, as the riding device covers it that nobody can make one, even if it is for his own use. Please let me know how that would be, as I am interested in the discussion. J. D. B., Quebec.

Ans.—To make even for one's own use exclusively a patented article, amounts, legally, to an infringement of the rights of the patentee, and the person so infringing may be restrained by law, and subjected to payment of damages and costs upon appropriate action being brought for the purpose. This goes of course, upon the assumption that the patent in question is valid and as comprehensive as claimed.

With live hogs selling at around \$8, and the supply uncommonly short, the announcement of James Wilson & Sons, of Fergus, Ont., that they have for sale 20 pure-bred Yorkshire sows, from 11 to 3 years old, that have had litters, and have been bred again to farrow in July and August; also 50 young sows, bred to farrow in the same months, should attract the attention of farmers and breeders, and find quick sale, as they are described as large and excellent animals.

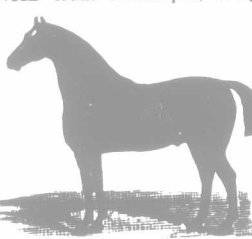
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 that make a horse Wheeze, Roar, have Thick Wind, or Choke-down, can be removed with
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 Farmers or ranchmen starting breeding Clydes, pure or grade, specially invited to correspond.

For Love Knot (Vol. XXVII) [5826]
 Sale Imported Clydesdale Brood Mare. Foaled May 25, 1902. Color dark brown, white stripe on face. Sire Lord Fontleroy (10370), dam Bridal Knot (13536). **MISS KNOI [7434]**; bay, foaled May 17, 1905. Sire Imp. Cairngaan (4757) (12073). Dam Imp. Love Knot (as above). These mares were the property of the late R. S. Cundie, of Barrie, Ont., and are now for sale, and can be inspected any time at Barrie. For further particulars apply to:
Thomas A. McCarthy, Box 472, Barrie, Ont.

Shetland, Welsh and Iceland Ponies
 I have on hand a number of single ponies and matched pairs; all ages; thoroughly broken to harness and reliable in every way.
Z. DYMENT, Copetown P.O. and Sta.
 PLEASE MENTION THIS PAPER.

QUESTIONS AND ANSWERS.
Veterinary.

SWOLLEN LEG.

Four-year-old mare swelled in one hind leg from foot to hock. It seems hard and feverish.
 W. J.
 Ans.—Give her a purgative of 8 drams aloes and two drams ginger. Follow up with 1 dram iodide of potassium in damp food three times daily. Hand-rub and bandage the leg, and after the purgative has ceased to act, give regular exercise.
 V.

LARYNGITIS.

My horses' throats are swollen. They cough, and discharge from their nostrils.
 O. L.

Ans.—Your horses have an inflammation of the throat, or larynx, called laryngitis. You must be very careful not to allow them to get wet or cold, and not heat them by working. Get a liniment made of 3 parts each of oil of turpentine and raw linseed oil and 1 part liquor ammonia fortior. Rub their throats twice daily with this for two days, and wrap their throats in flannel. Give each, four times daily, 3 drams chlorate of potassium and 20 grains quinine sulphate. If complications arise, send for your veterinarian.
 V.

Miscellaneous.

BREEDING HEIFER—YOUNG BULL.

1. A heifer calved very young. I intend letting her run 20 months before freshening again. How long should I let her dry to get her in shape for official testing?
 2. Does it do a bull eight months old harm to run with cows? At what age is he fit for service? **SUBSCRIBER.**

Ans.—1. The enquirer is probably aware that by the rules for admission to the Record of Performance for a yearly test, every cow accepted for registration must drop a calf within 15 months after commencement of the test. In the four-year-old class, and the mature class, no cow will be accepted for registration in the Record if the beginning of her previous lactation period was more than fifteen months before the commencement of the test. We are not aware that for a weekly or monthly test there is any rule restricting the period a cow may remain dry before commencing a test. It is known that a cow which has been dry for three months or more, and well fed during the interim, will give much more milk than one that has been dry for half that time, or less. In the case in question, we think the heifer should have a rest for at least three months.

2. A bull should not be used for service before he is 12 months old, and then to only a very limited extent, not more than twice a week. Earlier service is believed to restrict his fertility later. It is not good practice to allow a young bull, or a bull of any age, to run with the cows, unless he is very sluggish and slow.

DUCKS DYING.

Young ducks are dying; some of them will take a weakness in the back and cannot walk, and die very quickly. In fact, many of them we never see anything wrong with until they are dead.
 W. M. K.

Ans.—It would have aided a correct determination to have known how old were the ducks; on what fed, and how housed. But the fact remains that all experienced breeders agree that sick ducks are as good as dead ducks, for it certainly does not pay to doctor them. If from constitutionally strong and well-mated parent stock, the offspring are usually strong, and grow rapidly. Ailments (to which ducks are not susceptible) are usually brought on by incorrect treatment and feeding. Here are some general rules which should always be observed, viz.: Keep young ducks from water until they are fully feathered, when they may be allowed to swim. Water to drink, which should always be regularly supplied, should be given to them in a narrow-tipped dish, or a small, shallow pan, so as to prevent them wetting themselves. Then, in hot weather, shade is all-important. Exposure to the sun is frequently fatal. I had an experience a few

years ago, when we had ducks on the farm. One hot morning—at the end of June—my man brought in one of our best-developed and healthy Pekin ducklings, limp and dead. "What do you think was the matter with the duck?" he asked. "What a pity," I said, "it is one of our best ducklings. Did you notice anything wrong with it?" "No," said he, "it was strong and busy chasing flies a short time ago, when I passed by. On coming back, a few minutes ago, I found it lying dead." "It got the usual rations?" I asked. "Yes," he replied, and then we both looked exceedingly nonplussed. It then occurred to me, and I asked, "Was it running about in the hot sun?" "Yes," was the reply. "Probably that was the cause of death," I remarked. And all other conditions being correct, what else can be said on the present occasion? In "The Farmer's Advocate" of 17th June, page 1013, proper rations for ducks are given.
 A. G. G.

GOSSIP.

"Of course, women should vote," said Oliver Herford. "Women deserve the suffrage as much as men—more, because their minds are purer and cleaner."
 "Cleaner?" cried the sweet young thing Mr. Herford had taken in to dinner. "Of course they are, ever and ever so much cleaner! But how do you know that?"
 "Because they change them so much oftener," said he, solemnly.

WHAT IS AN INCH OF RAIN?

The rain fell in buckets, the thunder rumbled terribly, and the lightning drew zigzag lines of bright gold upon the violet sky.

"So you, too, don't know what an inch of rain is exactly," said the weather clerk, as he looked at his rain-measuring instrument. "Very few people do, it seems. I'll explain it to you."

"An acre is 6,272,640 square inches. An inch of water on an acre is, therefore, 6,272,640 cubic inches. That amount, at 227 cubic inches to the gallon, equals 22,000 gallons, or 220,000 lbs., or 100 tons.

"An inch of rain is, in other words, rain falling at the rate of 100 tons to the acre."

THE VALUE OF SHEEP.

The following experience of a Texas man, shows the value of sheep from many viewpoints, and what he did, any other farmer can do. He says:

"The way I happened to put a flock of sheep on my farm is this: Going back and forth between my town and Dallas, I noticed two adjoining farms, each showing that there was a good farmer on it; yet one was completely clean of weeds, and the other had the usual number. I saw two pastures; one with tender grass growing and not a weed in sight, while the other, in places, had more weeds than grass. I investigated, and found that both farmers were first-class workers and knew how, but one had a flock of sheep on his place, while the other had not. This set me to thinking, and I decided I would look into the matter. After some correspondence I purchased fourteen ewes and a ram from a dealer in the State, and began experimenting with them. That was eighteen months ago. I now have forty head, and am going to buy more.

"I find that the sheep is valuable on the farm for its usefulness in destroying weeds, if nothing else, that the wool clip will more than pay for the cost of the feed during the months when there is no pasture; that the trouble to keep them is comparatively nothing, and that the increase is almost 100 per cent. annually.

"Sheep, if treated kindly, are easier handled and more easily trained than either horses, cattle, or hogs. With just a little effort, one can teach them to drive, or to follow from lot to pasture, and the reverse. I think every farmer should have a small flock for the purpose of utilizing the waste about his place, cleaning his fence rows of weeds and bushes, and enriching the soil. And when you consider the two sources of profit—the sale of wool and the sale of lambs, at to-day's prices—it is clear that within a few years on most every farm there will be found a bunch of sheep.

Palpitation of the Heart.

One of the first danger signals that announce something wrong with the heart is the irregular beat or violent throb. Often there is only a fluttering sensation, or an "all gone" sinking feeling; or again, there may be a most violent beating, with flushings of the skin and visible pulsations of the arteries. The person may experience a smothering sensation, gasp for breath and feel as though about to die. In such cases the action of Milburn's Heart and Nerve Pills in quieting the heart, restoring its normal beat and imparting tone to the nerve centres, is, beyond all question, marvellous. They give such prompt relief that no one need suffer.

Mrs. Arthur Mason, Marlbank, Ont., writes:—"Just a few lines to let you know what Milburn's Heart and Nerve Pills have done for me. I have been troubled with weakness and palpitation of the heart, would have severe choking spells and could scarcely lie down at all. I tried many remedies but got none to answer my case like your pills did. I can recommend them highly to all with heart or nerve trouble."

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 B. T. BUCHANAN & CO., ROXBOROUGH, Ont. 2



Aberdeen-Angus Cattle
 For Sale: Cows, Heifers, Bulls.
 Good strains at reasonable prices. Apply to:
Andrew Dinsmore, Manager,
 "Grape Grange" Farm, Clarksburg, Ont.

For sale: The right sort, some of them by Klondyke, imp. Drumbo station.
Aberdeen-Angus
WALTER HALL,
 Washington, Ontario.

HOMESTEAD ABERDEEN-ANGUS
 Young cows at \$60 and up. Calves at \$25 and up. Come and see them, or write:
WM. ISCHE,
 Sebringville, Ont.
 Long-distance phone.



At Dominion Exhibitions, Halifax, Nova Scotia, in 1906; Sherbrooke, Que., 1907; Calgary, Alta., 1908, our Aberdeen-Angus herd won all the champion and grand champion prizes. Out of a possible of 42 first-prizes our herd won 40. We have a good graded show herd for sale. Also single animals, bulls and females.
JAMES BOWMAN, Elm Park, Guelph.

Listen, Suffering Sisters!

days I knew that my health continued treatment for one month, at a cost of only 2 cents a day, and am now a healthy, happy woman; my ambition has returned. I am robust, plump and strong. Any woman sufferer who will take the advice of a sister will write Mrs. Summers. Her free book illustrates and explains why women suffer, and tells how to safely and surely cure yourself at home, without trouble loss of work or expense of doctors. Mrs. Summers does this kind work to prove, before you invest a cent, that her treatment permanently restores lost health, vigor and happiness. The 10 days' trial costs you nothing, and is sufficient to give any sufferer new hope. No obligation to continue treatment if you think it will not benefit you. But it has made a new woman of me.—Yours sincerely, Miss J. A. (name and address upon application).

MRS. M. SUMMERS, BOX H. 821, WINDSOR, ONT.



YOU are my sisters in suffering. I know only too well what you are enduring, and I owe it to you to tell of the blessed good Mrs. Summers has done for me in permanently restoring my former health and happiness. I consulted every doctor, every specialist, in vain. No doctor understands a woman's peculiar suffering. My mother administered all the old-fashioned home treatments, but without results. I felt that I must give up—all hope was lost. I heard how Mrs. Summers had permanently cured some of my friends. I wrote her for advice as a last resort. She studied my case, and sent me, free, her book "Woman's Own Medical Adviser," with 10 days' free treatment of her wonderful remedy. In ten would be restored. I con-

HEREFORDS! THE "MAPLES" HEREFORDS

Canada's Greatest Show Herd.



For Sale: 25 bulls from 6 to 18 months of age, bred from imported and show stock; also about the same number of heifers, none better. Prices right.

W. H. HUNTER,
Orangeville P.O. and Sta.

3 Bulls, 15 Months.
10 Bull Calves, 6 to 8 Months.

For up-to-date beef type, breeding and quality, you can't beat them, and my prices are right, too.

"Ingle side Farm" H. D. Smith, Hamilton, Ont.



SOME SHOW PROPOSITIONS IN BOTH MALE AND FEMALE

SHORTHORNS

as well as a number of the useful sort of both sexes. Prices right. Large lot to select from. Up-to-date in breeding, etc. Catalogue.

JOHN CLANCY,
Manager.

H. Cargill & Son, Cargill, Ont.

GLENGORE Present offering: Two choice bulls ready for service, and anything in the female line. A choice lot and sold right. **GEO. DAVIS & SONS,** ALTON, ONT., Station, C. P. R.

Green Grove Shorthorns and Yorkshires A few young bulls and sows, ready for service, to offer. **Geo. D. Fletcher, Binkham P. O., Ont., Erin Shipping Station, C. P. R.**

7 Imported Scotch Shorthorn Bulls 7

Six imported bull calves from 9 to 14 months old, 3 reds and 3 roans. They are of such noted families as Clara, Jilt, Roan Lady, Butterfly, Claret and Broadhooks. One imp. bull 2 years old, red; a most valuable sire. One bull 11 months old, roan, from imp. sire and dam; promising for a show bull. Two bulls 12 months old, from imp. sire and dam; suitable for pure-bred or grade herd. Also females all ages. Write for catalogue. Prices reasonable. Farm 1/4 mile from Burlington Junction station, G. T. R.

FRED. BARNETT, MANAGER.

J. F. MITCHELL, BURLINGTON, ONT.



Willow Bank Stock Farm

SHORTHORNS AND LEICESTERS.

Herd established 1855; flock 1848. Am offering a special good lot of young females, bred to the great Duthie bull, Imp. Joy of Also young bulls and Leicester sheep fitted for showing. Write for prices.

JAMES DOUGLAS, CALEDONIA, ONTARIO.

1854—Maple Lodge Stock Farm—1909

Shorthorn bulls and heifers of extra quality and breeding, and from best milking strains.

Leicesters of first quality for sale. Can furnish show flocks.

A. W. SMITH, Maple Lodge P.O., Ontario, Lucan Crossing Sta., G. T. R., one mile.

PLEASE MENTION THIS PAPER.

SHORTHORNS

Belmar Parc.

Calves for sale by our grand quartette of breeding and show bulls: Nonpareil Archer, Imp., Proud Gift, Imp., Margold Sailor, Nonpareil Eclipse, Females, imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers.

John Douglas, Manager. PETER WHITE, Pembroke, Ont.

Geo. Amos & Son,

MOFFAT, ONTARIO.

For sale: Several good young heifers, some of them show heifers, and all of the very best Scotch breeding. Correspondence solicited and inspection invited.

Moffat Station, 11 Miles East of City of Guelph, on C. P. R.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

JAMES McARTHUR, Gobles, Ontario.

We are offering 5 Good Young Bulls at very reasonable prices in order to clear, also 2 VERY CHOICE JUNIOR YEARLINGS IN SHOW CONDITION. We can sell some extra well bred cows and heifers (bred or with calves at foot) at prices which should interest intending purchasers. Our farms are quite close to Burlington Jct., G. T. R. Long-distance teleph. one.

W. G. Pettit & Sons, Freeman, Ontario.

Shorthorn Cattle

AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,

Breeds SCOTCH SHORTHORNS Exclusively

Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295766. A. H. B.; Gloster King = 68708 = 283804. A. H. B. Young stock for sale. Long-distance phone in house.

Choice Scotch Shorthorns

We are offering several very choice heifers: Duchess of Glosters, show heifers among them. Also a few extra good young bulls.

S. F. Johnston & Son, Ashburn P. O., Myrtle Station.

GOSSIP.

AMONG THE AYRSHIRES AROUND HOWICK, QUE.

The Province of Quebec has long been recognized as the great breeding center of Ayrshire cattle in Canada, and Chateauguay County, south of Montreal, as the home of Quebec's largest and choicest herds, and most enthusiastic breeders, largely accounted for by the fact that Chateauguay County is thickly populated by people of Scotch descent, who take to Ayrshire cattle as naturally as a duck takes to water. Prominent among the many noted breeders of this section is R. R. Ness, the most extensive importer and breeder of Ayrshire cattle on the continent, and certainly one of the best judges of the breed in Canada, his annual importations ranging from 50 to 100 head. He has lately returned home with his 1909 importation, among which are a number of the best procurable in Scotland, bought at prices considerably in advance of those ever before paid for Ayrshires in the home of the breed. Fifty-one head make up the sum total of this importation. Two of them are two-year-old bulls, nine are one-year-old bulls, and one a bull calf. The latter, bred by T. Barr, of Holbistland, is an extra-choice youngster; one of the 2-year-old bulls was sired by Monkland Guarantee, unbeaten as a yearling, and first and champion at Kilmarnock, and first at Glasgow as a two-year-old, when he was imported by H. A. Morgan, of Ste. Anne de Bellevue, Que. The dam of this young bull is Favorite Beauty of Auchinbraim, whose milk record is 70 lbs. a day. Besides being so richly bred, he is a winner himself having several firsts to his credit as a yearling, and second this year at Glasgow, the other two-year-old bull winning sixth this year at Ayr. Among the females of this importation are two six-year-old cows, Auchinbraim Fancy 9th, who, as a three-year-old, gave 56 lbs. of milk a day, as a four-year-old, 68 lbs., as a five-year-old, 70 lbs. She is due to calve in August, and should her calf be a bull, Mr. Ness has a standing offer of \$200 for it, to be returned to Scotland. The other six-year-old is Culaigrie Bonnie Jean, whose milk record is 70 lbs. a day. The others are all young, three three-year-old heifers, the balance two years, one year, and calves. These, on arrival home from quarantine, will make a total of 135 head for the "Burnside" pastures, a lot unequalled in America for selection to intending purchasers.

Another breeder of note in the vicinity of Huntingdon, Que., the home of W. F. Stephen, the genial Secretary of the Ayrshire Association. Mr. Stephen is owner of one of the oldest-established herds in Quebec. He was one of the first dairy cattle breeders in Canada to advocate and carry out a careful and systematic daily weighing and testing of each individual cow's milk, thereby determining which cows were profitable and paid a fair dividend. This system has been in vogue on his farm for a great many years, with the result that every animal in Mr. Stephen's herd of milking age is a moneymaker. This fact is so well known that all his surplus stock find a ready sale.

Another breeder of note in the vicinity of Huntingdon is D. McFarlane, Kelso P. O. David surprised the talent at Ottawa Exhibition in the fall of 1907, when he brought out the Canadian-bred cow that cleaned up the bunch, and she is only one of many of the good ones that go to make up his splendid herd. In all these herds are a number for sale, either imported or Canadian-bred, males or females, old or young. In this section can be bought carload lots, if required.

An Ohio sheep-breeder reports the recent sale of a wagon load of wool, the present season's clip of his flock, which cost the buyer \$1,663.50. How many loads of any other farm crop would be required to equal this record?

J. A. Watt, Salem, Ont., reports the following recent sales of Shorthorns: To James Sealbrook, Massie, Ont., the seventeen months' red bull, Proud Champion, an extra big, strong bull, sired by Rosebud Champion, dam Juanita, one of the best imported cows in Ontario; to J. C. Bricker, Elmira, Banner Boy, an excellent roan son of Jilt Victor; to B. McGowan, Orton, "The Abbot," a thirteen-months' son of Jilt Victor, dam Larkspur, a daughter of the good sire and show bull, Abbotford. I consider "The Abbot" one of the best sons of Jilt Victor. If carried on well, he should develop into a good show animal. These sales have all been made in the last two weeks.

R. NESS & SONS.

A short visit to Woodside Farm, the beautiful home of R. Ness & Sons, Howick, Que., found their stud of imported Clydesdales somewhat low in numbers, owing to the almost phenomenal demand that 1909 has brought forth. In the early part of the season, so great was the demand, that of their last year's large importation, only one was left. Aerobal (imp.), a bay four-year-old son of Alexander Everard, dam by Baron's Pride. He is a low-down, very thick, smooth, compact horse, of the cart-horse kind, with a grand quality bottom. Some few weeks ago, the firm had sent out, from the Messrs. Montgomery's stud, a pair of choice stallions, Baron Craigie, a bay four-year-old, by Up-to-Time, dam by Superb, a horse of very commanding appearance and quality throughout, has since been sold to Taylor Bros., of DeWetville, Que., who certainly deserve the thanks of the breeders of that section for putting within their reach the services of so choice a stallion. The other was Viscount Lothian, a bay four-year-old, by Ludless, by MacGregor, dam by Superb. He is a horse of superior type, quality and character, and will certainly be heard from in the show-rings this fall. Mr. Ness, Sr., is now in Scotland making selections for this year's importation, which will arrive in time for the fall shows.

Diarrhoea, Dysentery, Colic and Cramps

Nearly every one is troubled with bowel complaint during the summer months. But, do they know what to do to cure it. Thousands do, many don't.

WE CAN TELL YOU!

DR. FOWLER'S

**Extract of
Wild Strawberry**

WILL DO IT!

It has been on the market 64 years, and is universally used in thousands of families.

There are many imitations of this sterling remedy, so do not be led into taking something "just as good" which some unscrupulous druggist tries to talk you into taking.

Dr. Fowler's is the original. There are none just as good. It cures Summer Complaint, Cholera Morbus, Cholera Infantum, Seasickness and all Bowel Complaints.

Price 35 cents. Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

A young New York broker of convivial habits fell in with an old school friend who had gone on the road.

"Whenever you're in town come up and bunk with me," he urged his friend as they separated. "No matter what old time it is. If I'm not there, just go ahead and make yourself at home. I'll be sure to turn up before daybreak."

Soon after this the salesman arrived in town about midnight, and, remembering his friend's invitation, sought out his boarding-house. There was only a dim light flickering in the hall, but he gave the bell a manful pull. Presently he found himself face to face with a landlady of grim and terrible aspect.

"Does Mr. Smith live here?" he faltered. "He does," snapped the landlady. "You can bring him right in!"

A French lady living in London engaged a carpenter to do some work for her at a stipulated price. She was surprised later to find that he charged more than the price agreed upon. When she attempted to remonstrate with him, however, her English failed her, and she said, "You are dearer to me now than when we were first engaged."

The first food of the day.

Every man, woman and child begins the day with more or less vigor of mind and strength of body according to the first food supplied to the stomach. The best first dish of the day is a bowl of Quaker Oats. The stomach can assimilate it more quickly and with less effort than other foods. There is little or no waste and every ounce of food is converted into muscle, vigor and brain activity. The strongest people in the world are the regular eaters of Quaker Oats. You should eat it for breakfast every day. Loyal Canadians are proud of this great industry. The mills are at Peterborough.

If you are convenient to the store you'll probably buy the regular size package. For those who live in the country the large size family package is more satisfactory. The large package contains a piece of handsome china for the table.

GOSSIP.

ORMSBY GRANGE STOCK FARM.

It was with much pleasure and confidence that a few months ago was reported, through these columns, the advent of Dr. D. McEachran as engaging in the business of importing and breeding Clydesdale horses. Few men in public life in Canada have been so long in the limelight of public opinion and retired with so much honor and so little adverse criticism. For about a quarter of a century Chief Veterinary Inspector for the Dominion, he it was who inaugurated the live-stock quarantine of Canada, and moulded the Contagious Diseases of Animals Act, that have kept our herds the cleanest from disease of any country on the face of the earth. And, not the least important by any means, he so regulated his machinery of inspection as to cause the least possible friction among all parties concerned. A few years ago he found the duties of that office too arduous for his advancing years, and placed his resignation in the hands of the Minister of Agriculture. Since then he has been looking around for a suitable location to establish a stock farm on a scale commensurate with his own ideas of what a stock farm should be, and he finally decided to locate at Ormstown, Que., about 47 miles south of Montreal, where he purchased several hundred acres of land of a texture particularly adapted to stock raising. At the time of a visit of a "Farmer's Advocate" representative a few days ago, a large gang of men were at work erecting commodious stables, which, when completed, will be equipped with electric light, and all modern improvements, making them second to none in Canada. A few months ago the Doctor journeyed to the home of his birth, and selected and brought out his first importation of Clydesdales. There is no man in Canada that knows a Clydesdale horse better than Dr. McEachran, and his many friends that expected to see him land something extra choice, were not disappointed, although we were not privileged to see them all, as several had been sold before our visit. We are free to say, however, that anyone wanting show animals in Clydes, can get them in his stables. There were only two stallions left, Selborne (14363) [8564], a bay three-year-old, sired by Pride of Blacou, dam Sibyl Grey, by Orlando, grandam by Superior. This colt is a half-brother to Acme (by Baron's Pride), being out of the same dam. He is up to a big size, of a grand style and quality from the ground up, a horse that has only to be seen to be appreciated. The other is Doctor Jim (14094) [8563], a bay three-year-old, by Pride of Blacou, dam by Prince MacGregor, grandam by Prince of Kyle. Although not so large as the other, he is an intensely sweet horse, of superb quality. In fillies, there are six on hand. Linlithgow Lass, is a bay five-year-old, by Everlasting, dam by Sir Everard. She is right royally bred, and is a right royal mare. She won several firsts and championships in Scotland, and certainly is one of the best Clyde mares in Canada. She has a filly foal at foot, by Sir Hugo. Mary o' Argyle is a bay three-year-old, by Knight of Angus, dam by William the Conqueror, grandam by Prince of Kintore. She is a big filly, of grand character, on the best of bottom. Kintore Belle, is another bay three-year-old, by Gartley Cashier, dam by Florizel, grandam by Gay Everard. Kintore Daisy is a brown three-year-old, by Broomberry, by Hiawatha, dam by Superb, grandam by Sir Everard. Bess of Knockstable is a bay three-year-old, by Gartley Cashier, by Prince Thomas, dam by Greor MacGregor, grandam by Prince David. Kintyre Peggy is also a bay three-year-old, by Knight of Angus, by Knight of Cowal, dam by Right at Last, grandam by Tinwald Grange. It will be seen from the above that from a breeder's standpoint, Scotland's richest blood is represented in these fillies, and their individuality is all that could be desired, as they combine size with quality and character. Any of these mentioned are for sale.

NOT BOASTFUL.

Stranger—"This village boasts of a choral society, doesn't it?" Resident—"No; we just endure it with resignation."

Rowan Hill Shorthorns The 1908 Toronto grand champion, Royal Chief 65495, heads my herd. For sale are: 3 spring bulls and a few heifers, sired by him, and out of show cows. These are choice young things that are sure to please. R. F. DUNCAN, Carlisle P. O., Ont. Caledonia Station, G. T. R., or station 13 Hamilton and Brantford Electric Road.



Shorthorns and Shropshires

Herd headed by Imp. Queen's Counsellor = 64215 = (96594). For sale: Three young bulls; also cows and heifers bred to Queen's Counsellor. The Shropshires are yearling rams and ewes, bred from imported Buttar ram.

H. L. STEAD, Wilton Grove, Ont. London, G. T. R., 6 miles; Westminster, P. M. R., 1 mile. Long-distance phone.

SHORTHORN BULLS PRICED

Red, two years old, from a good imported cow, price \$100. Roan, thirteen months old, extra good, short-legged calf from one of my best cows, \$100. Red and White, thirteen months, out of Lady Madge, by Langford Eclipse, price \$75.

JOHN MILLER, BROUGHAM, ONTARIO. CLAREMONT STATION, C. P. R.



VALLEY HOME SHORTHORNS AND BERKSHIRES

For sale: 6 grand young bulls from ten to eighteen months old, young cows with calves at foot, and ten one and two-year-old heifers. All our own breeding. Some are very choice show animals. Also young sows, and a fine boar 12 months old. S. J. PEARSON, SON & CO., MEADOWVALE P. O. AND STATION C.P.R.

Imported Bull!

To save inbreeding I will sell the Cruickshank (Duthie bred) imp. bull, Sittytton Victor = 50093 = (8737), a proven sire of merit, gentle and active. Also some young bulls by him, out of imp. dams. Address: John Brydone, Milverton, Ont.



HAWTHORN HERD OF DEEP-MILKING

Shorthorns

For Sale: 2 young bulls and 10 heifers, sired by Aberdeen Hero (imp.) = 28840 =. Some bred to the Lavender bull, Lavender Lorne = 65706 =. WM. GRAINGER & SON, Lonsdale, Ontario.

During the Busy Season

MAPLE SHADE FARM. Long-distance telephones.

If you need a Shorthorn bull we will ship one on approval, and if you are not suited you may ship him back. Write us for terms and conditions. Just two ready for service. Both Cruickshank Lavenders. STATIONS: } MYRTLE, C. P. R. BROOKLIN, G. T. R.

JOHN DRYDEN & SON, BROOKLIN, ONT.

Scotch Shorthorns Canada's greatest living sire, Mildred's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated. GEO. GIER, Grand Valley P. O., Ont. Welder Sta., C. P. R.

JOHN GARDHOUSE & SONS Always have for sale a number of first-class Shorthorns, Shires and Lincolns, of both sexes. Drop us a line, or better, come and see for yourself. HIGHFIELD P. O., ONTARIO. Weston Sta., G. T. R. & C. P. R. Long-distance phone in house.

WHY NOT BUY A HIGH-CLASS SCOTCH SHORTHORN COW, Or a Heifer, Or a Bull, Or a Few Shropshire Ewes, Or a Few Cotswold Ewes, NOW, While You Can Buy Them Low?

I can offer you something in any of them that will make a start second to none. Write for what you want. ROBERT MILLER, STOUFFVILLE, ONT.

SPRING VALLEY SHORTHORNS

One 14 months' old imported bull, bred by A. M. Gordon. Good enough to head any herd. Five Canadian-bred bulls from 12 to 16 months. Will be priced very reasonable, as we do not want to run them over.

KYLE BROS., AYR, ONT.

Greengill Shorthorns!

Our present offering consists of 10 young bulls, from 8 to 20 months. All nice reds and roans. A number of them from imp. sire and dam. Prices right.

R. Mitchell & Sons, Nelson P. O., Ont. Burlington Jct. Sta.

Show Cattle

The best bunch ever on the farm. All ages. Not exhibiting this year. H. Smith, Exeter, Ont.



Scotch Shorthorns Five choice red roan, 10 to 15 months, by imp. Protector; some out of imp. dams. Also cows and three-year-old heifers in calf. MCFARLANE & FORD, BOX 41, DUTTON, ONT.

SHORTHORNS AND BERKSHIRES One choice young Lady Fanny bull for sale—good herd header; also several young heifers. A few prizewinning Berkshires, both sexes. Write or come and see them. Prices moderate. ISRAEL GROFF, ELMIRA, ONTARIO.

A FEW YOUNG BULLS and 20 YOUNG COWS and HEIFERS COMPOSE OUR LIST FOR PRIVATE SALE. J. A. WATT, SALEM, ONTARIO. ELORA STATION, G. T. R. AND C. P. R. FARM ADJOINS TOWN. BELL TELEPHONE.

GLENBURN STOCK FARM!

One yearling SHORTHORN BULL, and a lot of cows, heifers and calves. Prices reasonable. John Racey, Lennoxville, Que.



ARE YOU IN WANT OF A CHOICE BULL TO HEAD YOUR HERD?

We are offering choice bull calves sired by Fountain's Boyle, who won first prize at Toronto, London and Ottawa, who also headed first-prize herd at Toronto and Ottawa. Also offering some choice heifers.

D. DUNCAN, DON, ONT. DUNCAN STATION, C. N. O.

Pine Ridge Jerseys—For Sale: (Earl Denton head of the herd.) Females, all ages. Yearling bull and a bull calf, 5 months, from a 10,000-lb. cow. Can spare also a few young cows and heifers due to calve soon. WM. WILLIS, Pine Ridge Farm, Newmarket, Ont.

THE GOLDEN LAD BULL.

Golden Fox of Dentonia. First-prize yearling and junior champion at Toronto, 1907, Exhibition. His calves coming from my pure St. Lambert cows proves this cross a wonderful success. Correspondence invited.

T. PORTER, Weston Road, 360 St. Clair Ave., Dovercourt, Toronto, Ont.

Brampton Jerseys

Canada's premier herd. Dairy quality. Bulls all ages for sale, from best dairy and show cows in Canada, and by best sires. Our herd is 175 strong.

B. H. BULL & SON, BRAMPTON, ONT.

Don't Judge a Roofing By Its Looks

On the surface, most ready roofings look the same.

But the weather finds the hidden weakness.

The weather finds the vegetable fibers in the fabric and rots them.

The weather finds the volatile oils which are concealed below the surface. The sun draws these oils, in globules, to the top of the roofing, where they evaporate in the air.

Where there was a globule of air, there remains a hole. And behind each hole is a tiny channel which lets the weather and water into the very heart of the roofing.

When the sun and the wind and weather have sought out the hidden weaknesses, the roofing is porous, instead of solid; water-soaked, instead of waterproof.

You can't tell by looks, which roofing will last twenty years, and which will go to pieces in a single summer.

Seventeen Years of Service

But you can do this: You can tell the original Ruberoid roofing—the only roofing which has lasted seventeen years—from the 300 substitutes which have proven their unworthiness.

Ruberoid was the first ready roofing. Its basis is the best wool felt impregnated with Ruberoid gum.

It is this wonderful flexible gum which no other maker can duplicate.

It is this gum which gives Ruberoid all the flexibility of rubber without containing an iota of it. It is this gum which withstands wind, weather, sun, fire, acid, gases and fumes, where all other compounds fail.

It is this gum, in the Ruberine cement which accompanies each roll of Ruberoid roofing, which makes ours practically a one-piece roofing—sealed against leaks—sealed against the weather.

Ruberoid comes plain and in colors. The attractive Red, Brown and Green Ruberoid are fine enough for the costliest home. And the color feature is exclusive—protected by patents.

In the past twenty years we have had experience not only with all ready roofings, but with other roofings—shingles, tar, tin, iron and other roofings.

We Test All Roofings

Each roofing we have exposed to the weather test, on our roof garden at our factory.

The result of these twenty years of tests we have written into a book which will be gladly sent you free.

This book is a gold mine of roofing information, telling about the advantages and disadvantages of each roofing for each purpose. To secure a copy, address Dept. 98F The Standard Paint Company of Canada, Ltd., Montreal.

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Be sure to look for this registered trademark which is stamped every four feet on the under side of all genuine Ruberoid. This is your protection against substitutes which many dealers brazenly sell as Ruberoid. Ruberoid is usually sold by but one dealer in a town. We will tell you the name of your Ruberoid dealer when you send for our free book.

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Well DRILLING & PROSPECTING MACHINES
Fastest drillers known. Great money earners.
LOOMIS MACHINE CO., TIFFIN, OHIO.

Ayrshire Cattle—Imported or Canadian-bred, for sale at all times; satisfaction guaranteed. For particulars, write:
W. THORN, Lynedoch, Ont.
Trout Run Stock Farm.



Stoneycroft Ayrshires

Choice young bulls and heifers of the very best breeding, combining show and dairy quality.

Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.

Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.



A BETTER LOT OF AYRSHIRE Cows and Heifers

Were never to be seen before at Stockwood. Deep milkers, good teats; lots of size, just the kind for foundation stock. Young bulls from prize-winning dams; also heifers. Prices low. Terms to suit purchaser. All stock guaranteed before shipping.

D. M. WATT, St. Louis Sta., Que.

Stonehouse Ayrshires.

36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.

HECTOR GORDON, Howick, Quebec.

AYRSHIRES AND YORKSHIRES!

Kindly send in your orders at once for imported stock. We can cable orders and have them shipped in May. Calves from imp. dams or from home-bred Record of Merit dams. Females any age. A few young pigs.

ALEX. HUME & CO., MENIE, ONTARIO.
HOARD'S STATION, G. T. R. Phone in residence.



Cattle Labels \$2 and \$1.50 for fifty tags. Sheep Labels, \$1 for fifty tags. With name and numbers. By return mail, prepaid. Write today. Sample free. **F. G. JAMES, Bowmanville, Ont.**

CHERRY BANK AYRSHIRES.

I am now offering young bulls and heifers true to type and high in quality. Some with imp. sire and dam; also will spare a few older females.
P. D. McArthur, North Georgetown P. O., Que.
Howick station, Que.

Springhill Ayrshires

Present offering: A number of high class bull calves, out of imp. sire and dams. Females all ages, imported and home-bred. Write your wants. Visitors always welcome. Phone connection.

Robt. Hunter & Sons, Maxville, Ont.



Ayrshires

Very fashionable. **N. DYMENT, CLAPPISON'S CORNERS, ONTARIO.**

Two young bulls, 12 months and 15 months old, of true dairy type.
UTILITY GLENORA OF KESLO = 15798 = AYRSHIRES at head of herd. For sale: Females of all ages, and several young bulls, some out of 11,000-lb. cows. Come and see, or address: **R. C. CLARK, Hammond, Ont.** Railway station, Hammond (G. T. R. and C. P. R.).

HAVE YOU EVER REALIZED THE RESULTS OF "ADVOCATE" ADS?

GOSSIP.

STORY OF MESSENGER.

When Messenger landed in the United States on May 16, 1788, the history of the trotting horse began. A flame was kindled that has never gone out. Messenger's light will never fade away, and any facts connected with the horse are always interesting to horsemen.

For many years there was a doubt about the place where Messenger was landed. It was claimed by some that he landed in New Jersey; others insisted that New York was the place where the horse first set foot on American soil, while others claimed that Philadelphia was the city in which he landed. The last-named is right, for in the Pennsylvania Packet and Advertiser of May 17, 1788, there is an account of the arrival at Philadelphia of the brig Dove, with assorted cargo, and the stallions Messenger and Governor, from Liverpool.

In a copy of the same paper, June 15, 1788, is an advertisement of a stallion bill, stating that the gray stallion, imported Messenger, would stand for service during the season of 1788, at the Black Horse Tavern Stable, on Market street, near where Twelfth street is now, at a fee of \$10 for the season, and \$1 each for the groom. In 1789, the same paper contained an ad that the horse would stand at William Cook's stable, on Lombard street, Philadelphia, at the same terms. The third season, 1790, the horse was at Cooper's Point, N. J., opposite Philadelphia.

The fourth season he was at Neshaminy Bridge, near Bristol, Pa.; his fee was \$15. From 1791 until 1808, he was kept in various places in the State of Pennsylvania, New Jersey and New York. The seasons of 1798, 1805 and 1806, he stood at Oyster Bay, Long Island, at Townshend, Cook's farm. His fee had been raised to \$45. In 1807, he was at a farm near where High Bridge is now. The fall of 1807, the horse was taken to Oyster Bay.

January 28, 1808, Messenger was found dead in his barn. Doubtless he died from old age, being twenty-eight years old. Such was the estimation in which the horse was held that the news of his death spread like wildfire throughout that part of the country. Hundreds flocked to see the last of the great hero. His grave was made under a large chestnut tree, the grave lined with cedar plank. The great sire was dressed in his holiday attire. He was loaded on a stone drag, and six of his sons, all gray, with a black body blanket, were hitched to the stone drag.

A military company, with a band of music, and hundreds of people, formed a procession, and followed the monarch of sires to his last resting place, where he was buried with military honors, and volley after volley of musketry was fired over his grave. A headstone was placed on his grave with the inscription, "Messenger, monarch of sires, foaled 1780, died January 28, 1808."

Messenger was a dapple gray, 15.3 hands high, large, bony head, with large ears, a splendid hazel eye, short, thick neck, his nostrils were twice the size of any ordinary horse, very powerful loins and quarters, very large hocks, and knees perfect; clean legs. Whether in motion or at rest, always in perfect position. His mane was sparse, but he had a splendid, flowing tail.

His pedigree, as it is given, traces through the famous Flying Childers directly to Darby Arabian. He was imported to America on account of his value as a running horse, and for the improvement of running stock. Where Messenger got his trotting instinct from is to some a hard problem to solve, while others seem to have struck the keynote. Engineer was by Samson, a thick, heavy-made horse, with large, bony legs, heavy mane and tail, with shaggy fetlocks, a big head and rough-coated, so much was he like a cart horse that many doubted his being sired by Bass, who was a fine-made, clean horse. Notwithstanding the doubt in the breeding of Samson, he proved to be a game racer. His propensity to trot was very strong. He would always start off on a trot, and trot quite to C. He was obliged to be whipped hard to induce him to change his trot into a run.

Although Engineer or Maudslaw showed no inclination to trot, perhaps it was because they had no chance to do so. The instinct to trot and sire trotters

cropped out in Messenger, and probably started in Samson.

Messenger had no great reputation while in England, and his star did not commence to shine in the United States for some years after he arrived there. Messenger had been in America but a short time when the Pennsylvania Legislature passed a law prohibiting racing. That compelled those owning horses to keep them for road purposes. About that time the country roads growing better, and road wagons being made lighter, trotting came into fashion, and the wonderful trotting speed of the Messenger family was discovered. It seems to have been more a matter of accident than anything else that Messenger was found to be a great sire of trotters.

Henry Arkell & Son, Arkell, Ont., write: "Everything is looking fine at Farnham Farm. The Oxforde were never in better shape. Notice our advertisement, which appears in this issue. We are not intending to exhibit anywhere the present year. We are importing a few rams for a little fresh blood, 'as usual,' and parties wanting flock-heads, or rams for show, would do well to order early either yearlings or ram lambs—as we have a number of good ones, from imported sire and dams."

John McFarlane, Dutton, Ont., writes: "I am highly pleased with your paper, having recently sold, through my advertisement, the three following young Short-horn bulls: To Mr. Minor, Ronson, McRae, a very choice animal; to W. H. McAllister, McGregor, which comes of a very fine milking strain, and to James French, Scotty, which gives promise to make one of the finest I have ever bred. I have on hand a number of nice heifers, due to calve shortly. They are sired by Royal Prince (imp.), and their calves will be by Protector (imp.). I also offer a beautiful yearling Hackney filly."

George G. Stewart, of Howick, Que., the well-known importer of Clydesdale horses, reports a more than successful season's trade, having disposed of all his 1908 importation some time ago, and still the inquiries come along, asking, what have you on hand in Clydesdales? To his many friends and patrons, he wishes to say that he intends to sail in a few days for Scotland, to select another importation, and assures the public they will be quite up to, or surpass, any previous importation he has made, both for size, quality, character, and breeding. Look out for his announcement in these columns on arrival home.

In the three days' butter test at the Bath and West of England Show at Exeter last month, Mr. Smith-Barry's Jersey cow won the first award and gold medal for cows of any breed or cross under 900 lbs. live weight. Her milk yield, 163 days after calving, was 140 lbs. 2 ozs., and butter 6 lbs. 7 ozs. In the class, 900 lbs. or over, the first award went to a Lincoln Red cow, whose yield, 45 days after calving, was 212 lbs. 10 ozs., and butter 8 lbs. 54 ozs. The averages of the cows competing, reduced to one day, were 16 Jerseys, 116 days after calving, 33 lbs. 34 ozs.; butter, 1 lb. 11 1/2 ozs.; ratio, lb. of milk to lb. of butter, 19.14. One Guernsey, 368 days after calving, milk, 36 lbs. 14 ozs.; butter, 1 lb. 94 ozs.; ratio, 23.36. Three Lincoln Reds, 53 days after calving, milk, 60 lbs. 5 ozs.; butter, 2 lbs. 34 ozs.; ratio, 27.18. One Devon, 119 days after calving, milk, 35 lbs. 74 ozs.; butter, 1 lb. 74 ozs.; ratio, 24.84. Five South Devons, 80 days after calving, milk 51 lbs. 14 ozs.; butter, 1 lb. 154 ozs.; ratio, 30.26. These averages were reported as up to the usual standard, showing that a one day's test may be accepted as reliable.

TRADE TOPIC.

Bahy Beach College and School of Music and Art, East Toronto, Ont., is situated four miles east of the city, and has direct street-car service. It is not only a favorite summer resort, but a permanent residential section, while easy of access to the advantages of city life. The teaching staff is strong and efficient, and the object of the college is to develop each pupil physically, mentally and morally. See the advertisement in this paper, and write for the calendar.

Bog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be limited. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

FAIRVIEW HERD The greatest A. R. U. herd of **HOLSTEINS** in northern New York. Headed by Pontiac Korndyke, the greatest sire of the breed, having five daughters whose seven-day records average 29 1/4 pounds each, and over 4.3% fat. Assisted by Rag Apple Korndyke, a son of Pontiac Korndyke, out of Pontiac Rag Apple, 31.62 pounds butter in 7 days, and 126.56 pounds in 30 days, at 4 years old. Cows and heifers in calf to the above two bulls for sale, also young bulls sired by them out of large-record cows. Write, or come and inspect our herd. **E. H. DOLLAR, Heuvelton, St. Lawrence Co., N. Y., near Prescott, Ont.**

MAPLE GLEN For sale: Only 1 bull, 11 months old, left; dam is sister to a 26-lb. tested cow. Any female in herd for sale, 7 with records 20 1/4 to 26 1/4 lb. official tests. An 8-yr.-old G. D. of Paul Beets De Kol, in calf to Oakland Sir Maida—her record 21.88 as a 5-yr.-old. Price \$400, or will dispose of herd as a great foundation privilege. **G. A. Gilroy, Glen Bull, Ont.** Long-distance phone connects with Brockville.

BUSINESS HOLSTEINS! Over 40 head to select from. Milk yield from 60 to 85 lbs. a day, and from 35 to 47 lbs. a day for 2-yr.-olds. There are 10 2-yr.-old heifers, 8 1-yr.-olds, and a number of heifer calves. Bulls from 1-yr.-old down. Priced right. Truthfully described. **W. Higginson, Inkerman, Ont.**

Sunny Hill Farm No more Holsteins for sale at present. Eggs from choice White Rocks and Buff Orpingtons, one dollar per setting. **DAVID RIFE & SONS, Hespeler, Ontario.** Waterloo County, C. P. R. and G. T. R.

DON'T Buy a **HOLSTEIN BULL** till you get my prices on choice goods from five months to one month old, from best producing strains. "Fairview Stock Farm." **FRED ABBOTT, Harrietsville, Ont.**

The traveller in Arkansas exhibited a peculiar nervousness on seeing the long-legged, slim, fiero-looking hogs that roamed at will over the country. At length he asked a native sitting on a fence by the roadside, "Aren't these razorback hogs rather dangerous?" "I never heard of none of them doing any harm," remarked the native. "I think they must be safety razorbacks."

Mark Twain, at a dinner at the Authors' Club said: "Speaking of fresh eggs, I am reminded of the town of Squash. In my early lecturing days I went to Squash to lecture in Temperance Hall, arriving in the afternoon. The town seemed very poorly billed. I thought I'd find out if the people knew anything at all about what was in store for them. So I turned in at the general store.

"Good afternoon, friend," I said to the general storekeeper. "Any entertainment here to-night to help a stranger while away his evening?"

"The general storekeeper, who was smiling mackerel, straightened up, wiped his bony hands on his apron, and said:

"I expect there's gon' to be a lecture. I been sellin' eggs all day."

QUESTIONS AND ANSWERS.
Miscellaneous.

SILLO QUESTIONS—BOARD VERSUS HOUSE RENT.

1. A new barn is built so that a silo could be built about 12 feet under ground and be perfectly dry. Would you consider this a good policy?
2. How would you advise building a silo to keep 25 head of cattle?
3. We were thinking of building a silo on another place where we intend to keep about 18 or 20 fat cattle. What size and material would you advise?
4. A hire with B for nine months for \$192 and board. In three months A gets married. What wages would you consider equivalent, if A gets a house and garden from B and boards at home?
5. What wages would you consider equivalent for a year, A to look after stock, cut wood, etc., in winter, and board home, to \$225 and board, A getting free house and garden?

NEWLY-WED.

Huron Co., Ont.

Ans.—1. Yes, providing the bottom of the silo is not more than three feet below the level of the floor on which the silage has to be thrown out in feeding. Unless the silo has a roof, a drain should be provided to carry off the surplus moisture.

2. We infer that our inquirer desires to know how large, what shape, and of what material, we would advise him to build. Regarding the latter point, he is referred to the editorial, issue June 17th, and to correspondence previously published. If gravel, or even crushed stone and coarse, clean sand, are available, and the buildings are permanently arranged, build cement, either monolithic or cement block. As for size, allowing 35 lbs. of silage per head per day for a feeding period of 200 days, 87 tons of good silage would be required, or, say, 90 tons, allowing for waste. A round silo, 30 feet deep, with an inside diameter of 13 feet, if filled, settled, and refilled once or twice, should hold the requisite amount. But as a silo greatly increases the stock-carrying capacity of a farm, you will probably soon be keeping enough cattle to take care of the contents of a silo 14 feet by 30 feet, which is a very good size to build. The above calculation has been based on the assumption that most of the cattle are mature, or nearly so.

3. The information is inadequate to permit of a satisfactory reply. The length of the feeding period, arrangement of buildings, and probable future disposition of the place, are all factors in the case. Count on 35 to 40 pounds of silage per head, calculate the contents of the contemplated silo in cubic feet, using the formula three and a seventh multiplied by the radius multiplied by the height, and divide by 50, to get the approximate capacity in tons, as 50 cubic feet of average settled silage will weigh a ton, though in a 30-foot silo a ton will not occupy that much space.

4 and 5. Ten dollars a month should be a fair allowance for board, against which there is to be set whatever may be a fair rent for the house and garden. For an ordinary house, such as is commonly provided for tenants, with a snug vegetable garden attached, three or four dollars a month should be reasonable for the summer. In winter, when the tenant has no use of the garden, the value would be a little less.

GOSSIP.

Volume 16, of the Clydesdale Studbook of Canada, has been issued from the office of the National Livestock Record Association at Ottawa. It is the largest of the series, containing 1,470 pages, and the pedigrees of stallions numbering from 6708 to 7999, and of mares from 10656 to 14729, or a total of 5,134 entries. This volume also contains the announcement of the several changes in the rules of registration adopted in the last two or three years; the revised rules, the minutes of the annual meeting of 1908, list of members, and the awards for Clydesdales at the leading Canadian fairs in 1908.

The Maples Holstein Herd!
RECORD-OF-MERIT COWS.

Headed by Lord Wayne Mechthilde Calamity. Nothing for sale at present but choice bull calves from Record of Merit dams; also a few good cows at reasonable prices.

WALBURN RIVERS, Folden's Corners, Ont.

HOLSTEINS and YORKSHIRES
FOR SALE

R. Honey, Brickley, Ontario, NORTHUMBERLAND COUNTY. Bulls fit for service, from cows with large records. Sows fit to mate, also young pigs, both sexes, of the very best bacon type. Prices reasonable.



Holsteins

FOR SALE: COWS AND HEIFERS

All ages. Also bull and heifer calves, including daughter and granddaughters of Pieterje Hengerveld Count De Kol, whose TWO famous daughters made over 32 lbs. butter each in 7 days, and sire of the "world's champion milking cow," De Kol Creamelle, which gave 119 lbs. in one day, over 10,000 lbs. in 100 days. Also for sale daughters of De Kol's 2nd Mutual Paul, sire of Maid Mutual De Kol, which gave over 31 lbs. butter in 7 days, also granddaughters of Hengerveld De Kol. Other leading breeds represented. Putnam station, near Ingersoll.

H. E. GEORGE,

CRAMPTON, ONTARIO.



MR. A. I. HICKMAN,
Court Lodge, Egerton, Kent, England,

EXPORTER OF PEDIGREE LIVE STOCK Of all descriptions. During the summer months the export of show and stud flocks of sheep will be a specialty. Who can do better for you than the man who lives on the spot? Mr. Hickman will be at the Bell Hotel, Gloucester, during the week of the Royal Show, and will be pleased to meet all foreign and colonial visitors there.

Centre and Hillview
Holsteins

For sale: 5 choice bulls fit for service now, from dams of extra good backing. Their sires are Brookbank, Butter Baron and Bonheur Statesman. Their dams and sires' dams and grandams average over 24 lbs. butter testing over 4 per cent. in 7 days.

P. D. EDE, Oxford Centre P. O., Woodstock Sta. Ont. Long-distance phone, Burgessville.

LAKEVIEW HOLSTEINS

We have for sale 4 young bulls ready for service, 2 of them by Brightest Canary, whose several nearest dams average 25 lbs., and whose B. F. test shows 4%; the other 2 equally as well bred. We have also for sale a few pure-bred females and a number of heavy-milking Holstein grades. **LAKEVIEW FARM, BRONTE, ONTARIO.** Write us for particulars. **W. D. Brecken, Manager.** Long-distance phone.



HOMWOOD HOLSTEINS

For Sale: Only thrifty bull calves from 4 R. O. M. cows; some will make great herd headers and show animals. Write for prices and description. Station on the place.

M. L. & M. H. HALEY, Springford, Ont.

BURNLEY POINT HOLSTEINS!

3 thrifty bull calves for sale, 8 months old. They are choice ones. Also 1 three-year-old bull.

WM. BATTY, CLARKSON, ONTARIO

MAPLE HILL HOLSTEIN - FRIESIANS

Special offering: Am now offering for first time my stock bull, Sir Mercedes Teake (7489), champion bull at Toronto and London, 1908. Can no longer use him to advantage, as I have twelve of his daughters in my herd.

G. W. CLEMONS, ST. GEORGE, ONT.

Holsteins

Record of Merit stock. One bull 13 months old. A number of bull calves, also a few young cows and heifers for sale.

THOS. HARTLEY, DOWNSVIEW, ONT.

Cures Without Drugs

Wonderful Invention Restores Health by Nature's Method.

There's no need of ruining your stomach by dopping it with drugs, trying to overcome pain or some chronic ailment. No need of doctor and drug bills, for here is a remedy that cures in Nature's way.

Most of the ailments of mankind are due to the failure or breaking down of the stomach, kidneys, liver, heart or digestive organs. When one of these organs fails to work properly, something happens; pain, disease or various chronic ailments result.

The reason any organ breaks down or fails to work properly is because it lacks motive power—electricity. That is proven. Now to cure pain or disease you must find the cause and remove it. If it is caused by a lack of electric energy, restore that force where it is needed and pain and sickness will disappear. That's my method. That's Nature's method. Electricity builds up, supplies strength—nourishment to the body. Drugs destroy, tear down, because they contain poison instead of nourishment. Of course, they can force an organ to act, but that organ is weaker after the effect of the drug has passed off. Drugs stop pain temporarily by stupefying the nerves, but the pain comes back and you have to take the drug again. Every dose weakens the nerves.

My Belt pumps a stream of electric life into every nerve and tissue of the body—building up vitality and strength and removing the causes of disease.

It does not shock or blister. The only sensation is a soothing glow.

Electro-Vigor has proven a great success. It has cured people all over the Dominion whom drugs had failed to benefit.

Dear Sir,—I am glad to say that I feel in good health and am stronger

than I ever was before. I have gained over fourteen pounds since I started to use your Belt, and I believe it has done great things for me. I can say to anyone else needing the use of your Belt that it will bring them to their natural health and strength again.

A. S. PARTRIDGE,
Monkton, Ont.

If you are skeptical, all I ask is reasonable security for the price of the Belt, and you can

Pay When Cured.

THIS IS FREE.

Cut out this coupon and bring or mail it to me. I'll give you a beautiful 100-page book, which tells all about my treatment. This book is illustrated with pictures of fully-developed men and women, showing how electricity is applied, and explains many things you want to know. I'll send the book, closely sealed and prepaid, free, if you will mail me this coupon.

Free test of my Belt if you call. Consultation free. Office hours, 9 a.m. to 6 p.m. Wednesday and Saturday until 8:30 p.m.

Put your name on this coupon and send it in.

DR. M. S. McLAUGHLIN,
112 Yonge St., Toronto, Can.

Send me your Free Book, closely sealed, and oblige.

NAME _____

ADDRESS _____

Hampshire Swine



Of the most popular show and breeding type. The breed that won over all three years in succession, including Canada and United States. We offer for sale now fifty pigs, both sexes, from 6 weeks to 3 months old, and will make good ones for fall breeding, also a few choice sows safe in pig. Call on or address:

A. O'NEIL & SON,
Birr, Ont.

Large White Yorkshires



Am offering during this month a good lot of young boars ready for service, young sows of breeding age, and a choice lot of spring pigs. Pairs supplied not akin. All bred from large imported stock. Write

H. J. DAVIS, Woodstock, Ont.

Maplehurst Herd of Tamworth Swine, Bronze Turkeys, Toulouse Geese, Pekin Ducks, S. C. W. Leghorns.

Tamworths of excellent breeding and ideal bacon type. Herd won sweepstakes at Toronto and London, 1905-6-7-8; winnings at World's Fair, St. Louis, 1904.—sweepstakes aged and junior herd, and two grand championships. Apply to:

D. DOUGLAS & SONS, MITCHELL, ONTARIO.
Bell phone in residence.

For Sale: CHESTER WHITES

of the right type. Apply to:

DANIEL DE COURCY, BORNHOLM, ONTARIO.



Monkland Yorkshires

We are offering 30 sows from 1 1/2 years to 3 years old that have had litters. All large and excellent sows—proved themselves good mothers. Bred again to farrow in July and August. Also 50 young sows to farrow in August. **Jas. Wilson & Sons, Fergus, Ont.**

Willowdale Berkshires!
Won the leading honors at Toronto last fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. **J. J. WILSON, MILTON, ONT., P. O. AND STATION. C. P. R. AND G. T. R.**

OHIO IMPROVED CHESTER WHITES.—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. **E. D. GEORGE Putnam, Ont.**

SOUTHDOWNS AND COLLIES.
Orders now solicited for especially-fitted sheep. Your choice of early lambs from imported and prize-winning Canadian-bred ewes, and by the sire of the Grand Champion wether at Chicago, 1907. Twenty shearlings, the choice of last year's lamb crop, also for sale. **ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.**

WOOL

HIGH PRICES. WRITE US.

E. T. CARTER & CO.,
84 FRONT ST. E. TORONTO, CANADA

Farnham Oxford Downs

The Champion Flock for Years.
Our present offering is 140 yearling rams; 20 of these fit for the show-ring, and are grand flock-headers. Also 50 yearling ewes, and a number of good ram and ewe lambs. They are all registered and by imported sires or g. sires imported, and a number from imported dams. Our prices are reasonable. **HENRY ARKELL & SON, ARKELL, ONTARIO.** Arkell, C. P. R.; Guelph, G. T. R., and Telegraph.

Fairview Shropshires

We now offer Excellent ewes, choice rams, and the best lots of lambs ever offered. All sired by our famous Chicago and St. Louis Grand champion rams, His Best and B. Sirdar. **J. & D. J. Campbell, Fairview Farm, Woodville, Ont.**

Mrs. Hix: "I don't take any stock in these fairview sires brought about by the buying on of hands."
Mrs. Dix: "Well, I do. I cured my little boy of the cigarette habit that way." **New York Globe.**

MAPLE LEAF BERKSHIRES

For sale: Young sows bred to farrow in May and June; boars fit for service; also young pigs farrowed in March and April. Imp. sires and dams. Pairs not akin. **C. P. R. and G. T. R. Joshua Lawrence, Oxford Centre, Ontario.**

Shannonbank Clydesdales, Ayrshires, Yorkshires. One stallion rising three years, by imp. Hopewell. Two young bulls ten months, and some heifers from six months to two years. Yorkshires of both sexes. **W. H. TRAN, Cedar Grove, Ont. Locust Hill Sta., C. P. R.**

NEWCASTLE TAMWORTHS, SHORTHORNS AND CLYDESDALES. Present offering: 3 Shorthorn cows with heifer calf at foot, 3, 4 and 5 months old respectively, and bred again; a choice lot of Tamworth boars and sows from 6 weeks to 5 months old, also a few really good sows bred during April and May. **A. A. COLWILL, NEWCASTLE, ONT.**

Morrison Tamworths, Shorthorns and Clydesdales. Tamworths from Toronto winners. Either sex. Any age. Sows bred and ready to breed. Pairs not akin. **CHAS. CURRIE, Morrison, Ont. Schaw Sta., C. P. R.**

"Why does Penryn call his coming novel 'A Scrap Book'?"
"Because it is a story of married life."

SUNNYMOUNT BERKSHIRES
Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand, good lot. Also younger ones. Pairs not akin. **JOHN McLEOD, C. P. R. & G. T. R. Milton P.O., Ont.**

DUROC - JERSEY SWINE
Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. **MAC CAMPBELL & SONS, HARWICH, ONT.**

Hampshire Down Sheep.
SPLENDID MUTTON, GOOD WOOL, GREAT WEIGHT.
Unrivalled in rapid and WONDERFULLY EARLY MATURITY, hardness of constitution, adapted to all climates, and in quality of MUTTON AND LARGE PROPORTION OF LEAN MEAT.
Champion against ALL breeds at the great Smithfield Show, London, 1908.
Full information of **Secretary, Hampshire Down Sheep Breeders' Association, SALISBURY, ENGLAND.**

American Shropshire Registry Association.

HENRY L. WARDWELL, PRESIDENT.
Largest membership of any live-stock organization in the world. Vol. 21 of the Record published. Write for rules.

Mortimer Levering, Sec., LaFayette, Indiana.
CLAYFIELD Buy now of the **Champion Cots-Stock** world Flock of America, 1906. Flock headers, ranch rams, ewes of different ages. All of first-class quality, and prices reasonable. Write, or call on **J. C. ROSS, Box 61, Jarvis, Ont.**

Ontario Fall Fair Dates.	
Ancaster	Sept. 28 and 29
Alexandria	Sept. 28 and 29
Almonte	Sept. 20 to 23
Alvinston	Oct. 5 and 6
Alliston	Oct. 7 and 8
Aylmer	Sept. 6 to 10
Atwood	Sept. 28 and 29
Aberfoyle	Oct. 5
Ashworth	Sept. 30
Arthur	Sept. 22 and 23
Amherstburg	Sept. 22 and 23
Acton	Oct. 5 and 6
Bothwell's Corners	Sept. 30 and Oct. 1
Bruce Mines	Sept. 22
Burk's Falls	Sept. 23 and 24
Bowmanville	Sept. 21 and 22
Brigden	Oct. 5
Beachburg	Sept. 30 and Oct. 1
Bobcaygeon	Sept. 29 and 30
Barrie	Sept. 27 to 29
Blackstock	Sept. 28 and 29
Burford	Oct. 5 and 6
Braacebridge	Sept. 22 to 24
Berwick	Sept. 9 and 10
Bolton	Oct. 4 and 5
Brockville	Sept. 7 to 9
Blenheim	Oct. 6 and 7
Brampton	Sept. 21 and 22
Burlington	Sept. 30
Baysville	Sept. 29
Brussels	Sept. 30 and Oct. 1
Belwood	Oct. 5 and 6
Beaverton	Oct. 5 and 6
Brighton	Sept. 22
Bradford	Oct. 19 and 20
Blyth	Oct. 5 and 6
Brimford	Oct. 4 and 5
Carp	Sept. 30 and Oct. 1
Clarksburg	Sept. 30 and Oct. 1
Cookstown	Oct. 5 and 6
Colde	Sept. 23 and 24
Colourg	Sept. 22 and 23
Castleton	Sept. 27 and 28
Comber	Oct. 5 and 6
Caledonia	Sept. 30 and Oct. 1
Chatsworth	Sept. 16 and 17
Campbellville	Oct. 12
Dresden	Sept. 30 and Oct. 1
Dundalk	Oct. 7 and 8
Delta	Sept. 27 to 29
Drumto	Sept. 28 and 29
Dunville	Sept. 21 and 22
Durham	Sept. 21 and 22
Delaware	Oct. 20
Dorchester	Oct. 6
Elmira	Sept. 28 and 29
Embro	Oct. 7
Urin	Oct. 11 and 15
Emsdale	Sept. 30
Essex	Sept. 29 and 30
Elmvale	Oct. 4 to 6
Florence	Oct. 7 and 8
Fort Erie	Sept. 11 and 15
Feversham	Oct. 5 and 6
Flesherton	Sept. 23 and 24
Fenwick	Oct. 12 and 13
Freston	Oct. 6 and 7
Fergus	Sept. 30 and Oct. 1
Fenelon Falls	Oct. 6 and 7
Frankville	Sept. 30 and Oct. 1
Forest	Sept. 29 and 30
Gorrie	Oct. 2
Grand Valley	Oct. 19 and 20
Gore Bay	Sept. 27 and 28
Galt	Sept. 21 and 22
Glencoe	Sept. 28 and 29
Goderich	Sept. 28 to 30
Glanford	Oct. 6
Haliburton	Sept. 30
Huntsville	Sept. 28 and 29
Highgate	Oct. 8 and 9
Harrow	Oct. 5 and 6
Hanover	Oct. 5 and 6
Ingersoll	Sept. 20 and 21
Iderton	Sept. 21
Jarvis	Oct. 5 and 6
Kagawong	Sept. 29
Keene	Oct. 5 and 6
Kilsyth	Oct. 7 and 8
Kincardine	Sept. 22 and 23
Kemptville	Sept. 30 and Oct. 1
Kirkton	Sept. 30 and Oct. 1
Kinnoumt	Oct. 10 and 11
Lambeth	Oct. 5
Lakefield	Sept. 28 and 29
Loring	Oct. 1
Lansdowne	Sept. 22 and 23
Lindsay	Sept. 23 to 25
Lucknow	Sept. 23 and 24
Listowel	Sept. 21 and 22
Lanark	Sept. 10
Little Current	Oct. 7
Langton	Oct. 9
Lynhurst	Sept. 21 and 22
London	Sept. 19 to 18
McDonald's Corners	Sept. 23 and 24
Massey	Oct. 5
Manitowaning	Sept. 30 and Oct. 1
Murillo	Sept. 21
Mt. Forest	Sept. 21 and 22
Mattawa	Sept. 23 and 24
Maberley	Sept. 28 and 29
Middleville	Oct. 1
Metcalfe	Sept. 20 and 21
Magnetawan	Sept. 29 and 30
Madoc	Sept. 13 and 14
Moirefield	Sept. 30 and Oct. 1
Milverton	Sept. 23 and 24
Merlin	Sept. 30 and Oct. 1
Mt. Brydges	Oct. 7
Norwich	Sept. 21 and 22
New Liskeard	Sept. 16 and 17
Newboro	Sept. 4 and 5
Newington	Sept. 21 and 22
New Hamburg	Sept. 16 and 17
Norwood	Oct. 12 and 13
Napanee	Sept. 14 and 15
Niagara	Sept. 22
Newmarket	Sept. 29 to Oct. 1
Orangeville	Sept. 23 and 24
Ohsweken	Sept. 29 to Oct. 1
Oakwood	Sept. 27 and 28
Oshawa	Sept. 14 and 15
Ode-sa	Oct. 1
Ottawa	Sept. 10 to 18
Onondaga	Oct. 5
Oro	Sept. 22
Owen Sound	Sept. 14 to 16
Otterville	Oct. 7 and 8
Orono	Sept. 13 and 14
Orillia	Sept. 23 and 24
Pricerville	Oct. 7 and 8
Pt. Carling	Sept. 22
Powassan	Sept. 28 and 29
Paris	Sept. 23 and 24
Palmerston	Sept. 28 and 29
Perth	Sept. 1 to 3
Parry Sound	Sept. 29 to Oct. 1
Petrolia	Sept. 23 to 25
Parhill	Oct. 5 and 6
Pinkerton	Sept. 24
Rockwood	Oct. 7 and 8
Rainham	Sept. 23
Roblin's Mills	Oct. 1 and 2
Panoma	Oct. 6
Rodney	Oct. 4 and 5
Rosenath	Oct. 1
Renfrew	Sept. 21 to 23
Rockton	Oct. 12 and 13
Richmond	Sept. 27 to 29
Roeklyn	Oct. 7 and 8
Richard's Landing	Sept. 25
Stratfordville	Sept. 15
Sarnia	Sept. 27 to 29
Spencerville	Sept. 28 and 29
Sundridge	Oct. 4 and 5
Sturgeon Falls	Sept. 22 and 23
Shelburne	Sept. 28 and 29
Sault Ste. Marie	Sept. 22 to 24
Spenceville	Sept. 27 and 28
South Mountain	Sept. 9 and 10
Smithville	Sept. 23 and 24
Simcoe	Oct. 12 to 14
St. Mary's	Sept. 22 and 23
Shannonville	Sept. 25
Stratford	Sept. 28 and 29
Shedden	Sept. 29
Streetsville	Sept. 29
Strathroy	Sept. 20 to 22
Schomberg	Oct. 11 and 15
Scarboro	Sept. 29
Tara	Oct. 5 and 6
Theford	Sept. 29
Tavistock	Sept. 20 and 21
Twed	Sept. 29 and 30
Thamesville	Oct. 1 to 6
Tilsonburg	Sept. 28 and 29
Tiverton	Oct. 5
Thessalon	Sept. 23
Teeswater	Oct. 5 and 6
Thorndale	Oct. 5
Thorold	Sept. 27 and 28
Toronto	Aug. 30 to Sept. 13
Utterson	Sept. 30 and Oct. 1
Underwood	Oct. 12
Vankleek Hill	Sept. 21 to 23
Verner	Sept. 20 and 21
Wyoming	Oct. 1 and 2
Wellesley	Sept. 14 and 15
Winchester	Sept. 7 and 8
Warkworth	Oct. 7 and 8
Warton	Sept. 23 and 24
Waterdown	Oct. 5
Wallacetown	Oct. 13 and 14
Wallacetown	Sept. 30 and Oct. 1
Wilkesport	Sept. 30
Walter's Falls	Sept. 28 and 29
Williamstown	Sept. 22 and 23
Weston	Oct. 1 and 2
Walkerton	Sept. 16 and 17
Watford	Oct. 7 and 8
Walsh	Oct. 15
Wolfe Island	Sept. 21 and 22
Woodbridge	Oct. 12 and 13
Windjam	Oct. 6
Woodville	Sept. 16 and 17
Zehner	Oct. 13

THE SPICE OF LIFE.

In answer to the question, "What passages in Holy Scripture bear upon cruelty to animals?" one boy said: "Cruel people often cut dogs' tails and ears, but the Bible says, 'Those whom God hath joined together let no man put asunder.'"

The teacher of elocution was nearly discouraged. He urged his pupils, in some excitement, to put more expression into their recitations. "Too flat!" he exclaimed. "Too colorless! You can do better than that. Try again. Now! Open your mouth and throw yourself into it!"

Jimnie was ordered to put eggs under an old clucking hen. He did his work all right, and during the conversation next morning, the fact came out that he had put thirty-five eggs under her. His mother said: "Johnnie, don't you know that a hen can only cover fifteen or sixteen eggs?" "I know that," said Johnnie, "but I just wanted to see the old thing spread herself."

"The editor of my paper," declared the newspaper business manager to a little coterie of friends, "is a peculiar genius. Why, would you believe it, when he draws his weekly salary, he keeps out only one dollar for spending money, and sends the rest to his wife in another city."

His listeners—with one exception, who sat silent and reflective—gave vent to loud murmurs of wonder and admiration. "Now, it may sound thin," added the speaker, "but it is true, nevertheless." "Oh, I don't doubt it at all!" quickly rejoined the quiet one, "I was only wondering what he does with the dollar!"

A superstitious farmer, opening his farm paper, noticed that a spider had been crushed to death between the pages. He wrote in some alarm to the editor, inquiring whether the incident betokened good or bad luck, for he was a confirmed believer in signs. The editor replied that the finding of a dead spider in the paper could not be regarded by the farmer as a sign at all, that the circumstances of the fatality indicated that the insect had met an untimely death, and the only deduction possible was that the spider had been scanning the advertising columns of the paper to find out who wasn't advertising, in order to get next to some dead business house, spin his web across its door, and live in peace forever after.

"One day," related Denny to his friend Jerry, "when Oi had wandered too far inland on me shore, Oi suddenly found that there was a great big haythen, tin feet tall, chasin' me wid a knife as long as yer arm. Oi took to me heels an' for fifty miles along the road we had it up an' tuck. Thin Oi turned into the woods an' we run for one hundred an' twenty miles more, wid him gainin' on me steadily, owin' to his knowledge of the country. Finally, just as Oi could feel his hot breath burnin' on the back of me neck, we came to a big lake. Wid one great leap Oi landed safe on the opposite shore, leavin' me pursuer confounded and impotent wid rage."

"Faith an' that was no great jump," commented Jerry, "considerin' the runnin' start ye had."

The play was one of Shakespeare's tragedies. Mrs. Simmons and her little boy, having been unable to secure seats in the parquet, were well located in the front row of the first balcony, where they could see better, and hear almost as well as if they had been further forward on the main floor.

Mrs. Simmons was agreeably surprised at the interest that Bobby appeared to take in the sombre drama. He sat leaning forward, with his elbows on the cushioned railing in front of him, resting his head on his hands, deeply absorbed. As the curtain went down on the first act he brightened up.

"Well, dear, how do you like Shakespeare?" asked his mother. "Are you enjoying the play?"

"Yes, ma," said Bobby, with the air of one who has made a great discovery. "There were sixty-nine men here that have red spots on the top of their heads! I've counted them five times!"

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"For more than five years I have been experimenting with our experts to find the BEST culvert for all-round uses. We sought the markets of the world for one that was just right; and we didn't find it. If we had, we'd have bought the patent rights for Canada. Finally, last spring we struck the idea. Then we put in some expensive months in making that idea better, —and NOW we've got a culvert that is so far ahead of any other there's no comparison."



"You'll read something about it here; but to KNOW how 'way-ahead it really is, you'll want to see the sample (sent free) and read the booklet (free, ditto). With that before you, you will soon see why every Reeve, or Warden, or Town Councillor, or anybody who has any use for culverts at all,—will find it pays to get in touch with me right NOW. I am asking you to lay aside your notions of what makes a good culvert, and a cheap culvert, and find out about this NEW culvert. I don't expect you to buy a foot of it until it PROVES to you that Pedlar Culverts are in a class by themselves, and that you can't afford to overlook them. Let us start that proof toward you soon—address nearest Pedlar place."

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Frost-Proof, Rust-Proof, and Wear-Proof

This triple-rib flange-lock principle, found only in Pedlar Culverts, not only adds greatly to the strength of the piping and makes a perfect joint—practically as good as if welded—but it also allows for expansion and contraction under cold or heat. Though a Pedlar Culvert, of any length, be frozen solid full of ice, it will not split nor spring a leak.

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State your probable needs and we will quote prices and discounts —



The sages of the general store were discussing the veracity of old Si Perkins when Uncle Bill Abbott ambled in.

"What do you think about it, Uncle Bill?" they asked him. "Would you call Si Perkins a liar?"

"Wall," answered Uncle Bill slowly, as he thoughtfully studied the ceiling, "I don't know as I'd go so far as to call him a liar exactly, but I do know this much: when feedin' time comes, in order to get any response from his hogs, he has to get somebody else to call 'em for him."

An old darky wanted to join a fashionable city church, and the minister, knowing it was hardly the thing to do, and not wishing to hurt his feelings, told him to go home and pray over it. In a few days the darky came back. "Well, what do you think of it by this time?" asked the preacher. "Well, sah," replied the colored man, "ah prayed an' prayed, an' de good Lawd, he says to me, 'Rastus, ah wouldn't bodder mah haid about dat no mo. Ah've been trying to git into dat chu'ch mahse'f for de las' twenty yeahs, and ah ain't done had no luck.'"

"I'm stone deaf, your honor," declared a prisoner in the dock at the police court the other day. "I didn't hear a word the officer said about me, and I can't hear what you are saying."

Although the judge raised his voice there was nothing doing from the prisoner. He only shook his head wearily. At last the judge turned to the officer and said, almost in a whisper: "He was drunk when arrested, wasn't he?" "I only had one glass of beer," said the prisoner quickly in an injured tone, and everyone laughed.



A structure like this, with PedlarCulvert, won't wash out nor need repairs.



PEDLAR Perfect Corrugated Galvanized CULVERT

A few hours' work and a few dollars will put a modern and permanent culvert in place of a ramshackle bridge. Easily laid by anybody.

Made of Special Billet Iron, Extra Heavy

In every size of Pedlar Culvert, which comes in all standard diameters from 8 inches to 6 feet, we use nothing but the best grade of Billet Iron, specially made for us, of extra-heavy gauge (14 to 20 gauge, according to the diameter). This Billet Iron is curved into semi-cylinders—curved COLD, so there will never be any variation from exact dimensions; and it is then deeply and smoothly corrugated on a special press that puts a pressure of SIXTY TONS on every square inch of the metal. The corrugations, therefore, are uniform and very deep.

Galvanized After Being Pressed Up

When the corrugating process is done, the sections are galvanized by our exclusive process that covers the entire surface with a thick coating of zinc spelter. Every edge, every crevice, is heavily coated with this rust-proof, corrosion-proof galvanizing, not a spot is left unprotected. This is the only culvert galvanized after being shaped. Is absolutely Rust-proof.

Will Stand Incredible Strains

The heavy-gauge Pedlar Billet Iron sections, deeply corrugated and locked together without bolts or rivets by our compression triple-rib (this rib is flat—not corrugated), make a culvert that will stand enormous crushing strains and neither give nor spring. A thin cushion of soil on top is all the protection such a culvert needs against traffic; and no special precautions need be observed in laying it,—it will stand what no other culvert can.

Compact—Portable Easily Laid

Half-sections nested for shipment

Pedlar Culverts are shipped in half-sections, nested—see Fig. 1. Saving freight charges and making carriage easy in roughest country. Quickly and easily transported anywhere.

Sections in course of assembling

Note that the ribs are flat, and the curved part of the cylinder deeply corrugated. These ribs add vastly to the culverts' strength.

Unskilled labor, with a single tool, quickly clamps the flanges together, making a triple-fold joint that is tighter and better than any riveted or bolted joint can be.

Clinking the flange-lock—no bolts, no rivets, no makeshifts

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Makes Kitchen Work Easy and Pays For Itself Too

Look At It In The Picture

Getting dinner—or any meal—takes only half as long when you have this Cabinet in your kitchen. Everything is so handy that cookery is a pleasure instead of drudgery. There's far less mess to clean up afterwards—it's so easy to keep the kitchen tidy—and the cook saves so many steps. Compact, sensible, and work-saving.

Let Me Send You One On Trial

You can pay for the Chatham Kitchen Cabinet a little at a time,—stretch the payments over many months—so it buys itself while you use it. After it has been a week in your kitchen you will wonder how you ever got on without it.

This Cabinet actually is, and I GUARANTEE it to be, better, more compact and more labor-saving in design than any other made. It costs less. It is more complete, more convenient, built better—a great deal better.

The wood-work is the finest selected Canadian chestnut, beautifully finished in rich, lustrous golden-brown.

The bake boards, drawers, flour-bin, are snow-white basswood—the shelves, hard, clean maple—knobs, handles, catches, heavy red copper—every part the best material money can buy.

Practical and Common-Sense

It couldn't be made more complete. Large enclosed closets for heavy utensils; plenty of shelves; shelf rack; two big drawers;—17½ inches wide, 5 inches deep; three small drawers; three cupboards; two big bins—self-moving; the whole thing 6 feet high, and mounted on double-acting rotary castors—easy to move around. Top is made of extra-heavy, polished zinc that will wear for years and be easy to keep clean all the while. Six aluminized canisters supplied free with Cabinet.

Take it on trial. Pay for it a little at a time. Nothing like it elsewhere.

Saves Room And Time

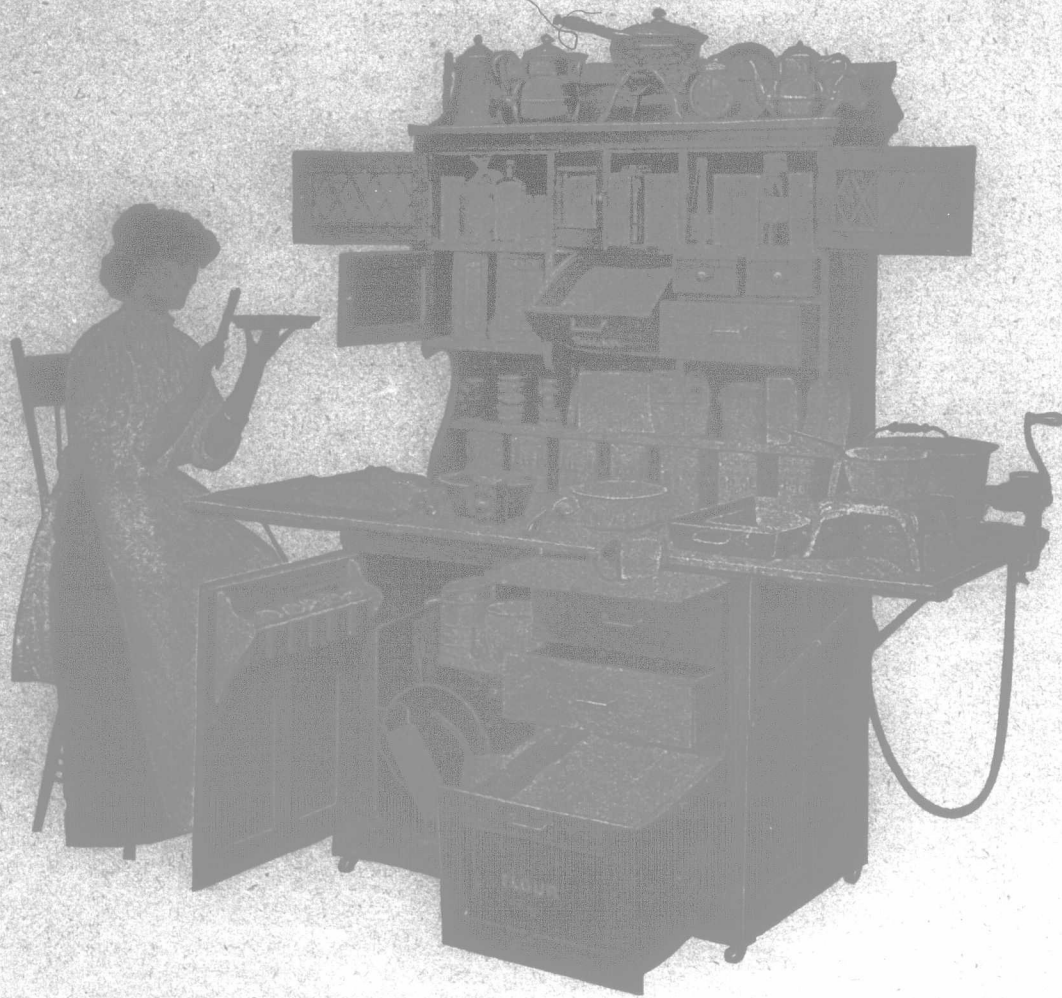
Take and try it in your kitchen,—see the work it does away with, the time it saves, the bother it puts an end to,—see how sensibly planned, how excellently built, how well worth its small cost it actually is. Indeed you will be well satisfied if you buy a Chatham Kitchen Cabinet. It is a most practical convenience.

Get My Long-Credit Offer

The drop-leaves (they'll hold a heavy man's weight) just double the table-top's area. Nothing is in the way,—nothing opens on the table's level.

The whole top is polished metal,—sanitary, clean, waterproof. All the fronts of drawers, doors and bins overlap,—that makes them dust-proof, fly-proof, CLEAN. All the inside parts are finished satin-smooth,—not a crevice nor a seam to harbor dirt or insects.

The flour-bin (that compartment lowest down) holds 75 pounds, has a curved solid-metal bottom, and glides in and out at a touch, on double roller ball-bearings. Every drawer shuts TIGHT, but never can stick. Every bin slides in and out EASILY. The whole Cabinet is mouse-proof.



The Chatham Kitchen Cabinet

Saves 500 Steps a Day in Any Kitchen
Saves endless bother and clutter



Fully Guaranteed In Every Detail

There are no out-of-the-way cubby-holes around a Chatham Kitchen Cabinet; but there IS a handy, easy-to-get-at place for everything that is used in getting a meal ready,—flour, sugar, salt, coffee, tea, spices, package food supplies, knives, spoons, kettles, bread-pans, etc., etc. Let me send you a book that illustrates and describes the Cabinet; or send me your order for it on trial, with my special credit terms and a guarantee that you will be wholly satisfied with it. Address me personally, or my nearest place.

MANSON CAMPBELL, President

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